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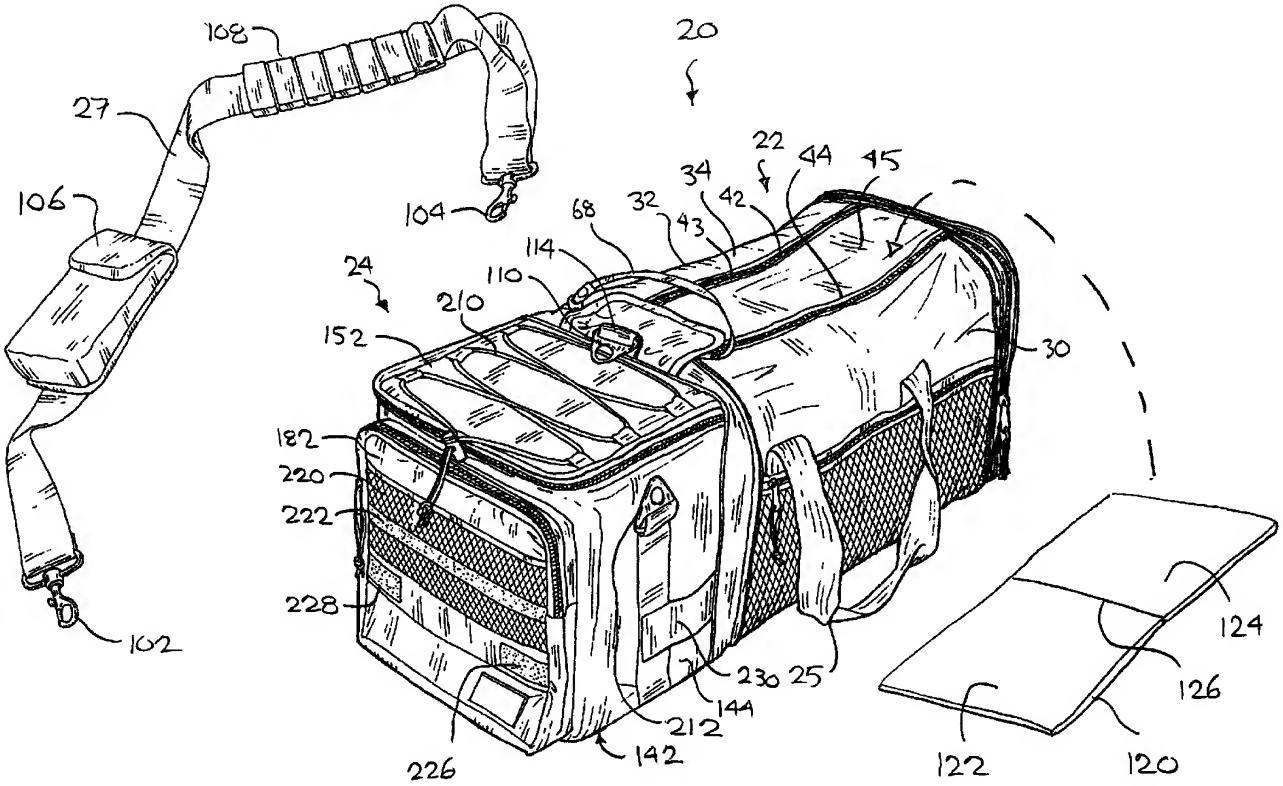

(57) Abrégé/Abstract:
A container assembly includes a utility bag, such as an athletic equipment container, or a gym bag, and a thermally insulated structure, such as a soft- sided cooler, that has a thermally insulated compartment. A person using the assembly can participate in a sporting activity, and while taking a break, or after finishing, can take refreshment or food from the insulated compartment. A liner can be employed to prevent migration of liquids between the enclosures. The athletic bag can be sift sided, and can be collapsible to a storage position. The insulated compartment can also be collapsible, to facilitate storage when not in use.

ABSTRACT

A container assembly includes a utility bag, such as an athletic equipment container, or a gym bag, and a thermally insulated structure, such as a soft-sided cooler, that has a thermally insulated compartment. A person using the assembly can participate in a sporting activity, and while taking a break, or after finishing, can take refreshment or food from the insulated compartment. A liner can be employed to prevent migration of liquids between the enclosures. The athletic bag can be sift sided, and can be collapsible to a storage position. The insulated compartment can also be collapsible, to facilitate storage when not in use.

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APPLICATION FOR CANADIAN LETTERS PATENT

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN THAT I, Melvin S. Mogil

of 86 Heddington Avenue, Toronto, Ontario M5N 2K8

Citizen of Canada, have invented a:

CONTAINER WITH INSULATED ENCLOSURE

of which the following is a specification.

CONTAINER WITH INSULATED ENCLOSURE

FIELD OF THE INVENTION

This invention relates to an integrated container that has an equipment storage compartment and a cooler.

BACKGROUND OF THE INVENTION

Carrying bags are used in many recreational activities. Typically, personal use carrying containers have a soft-sided body with handles, or a shoulder strap, or both, for ease of carrying. Carrying containers are of many types. They may be characterized as "equipment bags", or most commonly, as "gym bags" or "duffel bags". Larger versions of similar structure may tend to be termed "hockey bags". Although rigid containers can also be used, they tend to be less commonly used for carrying sports equipment. Rigid containers with large carrying volumes tend to be bulky, and may be difficult, or cumbersome. A rigid container may also tend to be heavy. A soft sided container can be flattened when not in use, and will tend to accommodate awkward shaped pieces of sports clothing, while also being suitably deformable for throwing in the irregular storage space of the trunk of a car, the footwell of a backseat of a car, or the rearward part of a van or station wagon.

Gym bags tend to have a number of desirable features. For example, they tend to be made of relatively light weight materials, so that they do not add unreasonably to the weight of objects to be carried. Further, inasmuch as they may be used to carry malodorous athletic clothing, they may tend to be made of a material that breathes, or that can itself be easily washed or aired. It is generally not desirable for the body of a gym bag to be made of a foamy or spongy material that may tend to absorb moisture, as from wet footwear or sweat, rain, or mud-soaked clothing, and whence it may be difficult adequately to rid pungent odours.

A gym bag, is distinct from a knapsack or a gunny sack. A knapsack is generally taller than broad or thick, and has a pair of straps on a leading portion to permit the sack to be carried on a wearer's back. A knapsack, when slung from one arm, may tend to drag on the ground, and, if carried high enough not to drag on the ground, may be tiring. A gunny sack tends also to be rather taller than wide or thick, and may tend to have a

draw string at the top, the draw string also serving as a grab by which the gunny sack can be slung over one's shoulder. Access to objects at the bottom of the sack may be relatively poor.

A gym bag, by contrast, is designed to be carried in one hand. A gym bag is typically longer than broad or deep, with aspect ratios of length to width in the order of 2:1 being common. A size of roughly 20 - 24 inches (0.5 to 0.6 m) in length, by 10 - 12 inches (25 - 30 cm) in width, and 10 - 12 inches (25 -30 cm) in height would be typical. This is a size that makes for a convenient carry-on bag, such as might squeeze to fit in the overhead bin during a commuter airplane flight, or for storing in the overhead rack of a bus. A gym bag is not usually greater than about 3 ft (1.0 m) in length, as beyond this size the bag becomes less handy and more cumbersome.

A gym bag generally has handles mounted on opposite longitudinal sides, such that a person can clasp both handles in one hand. When so grasped, the handles tend to be relatively close to the center of gravity of the bag (depending, of course, on how it is loaded). In use, when being carried in one hand by a user of average height, a gym bag tends to swing at about the level of the user's knee or calf, the handles generally being too short to permit the bag to drag on the ground and be scuffed. A gym bag does not tend to have back pack straps, since it is generally not intended to be carried over great distances. Rather, a gym bag is intended to be carried to an activity venue, such as a sport field, and carried back home again when the activity is finished.

The main compartment of a gym bag, frequently the only compartment, generally has a closure member in the nature of a zipper, or a pair of parallel zippers, running longitudinally from end to end of the bag between the handles along the top potion of the bag. The bag is generally shallow enough to give good access to all parts of the interior when the zipper is open.

While gym bags are longer than tall, the cross-section of gym bags varies. Smaller, older gym bags tend to have a round, or nearly round, cylindrical shape with few adornments. In more recent times gym bags have tended to be larger in section, and to tend to be more square or rectangular in shape. A third kind of gym bag is often seen in use for racquet sports, and has a base that is roughly rectangular, having an aspect ratio of length to width of 1.5: 1 to 2.5: 1, and sides that taper somewhat upwardly and inwardly. Gym bags of this type tend to be somewhat taller than wide, and may have an external racquet pouch.

There are many occasions when it may be desirable to carry both perishable food items, such as fresh fruit, or cool drinks, simultaneously with a relatively large volume of other items, such sports clothing. While engaged in strenuous sporting activity, such as soccer or other field sports, tennis or other racquet sports, or other physical activity, a person may tend to work up a good thirst. At a break in the game or match a cool drink may be preferred, rather than a tepid liquid that has been left too long in the sun. Large coolers for carrying beer for the entire team are well known, for example. It has also become common at sporting events, or vigorous physical activities, for participants to desire refreshment, whether merely drinks or also including foods, such as sliced oranges.

A participant in a sport may not wish to carry separate containers, such as a gym bag for sports clothing and a portable cooler for refreshments. It may also be undesirable to carry refreshments, whether drinks or perishable foods such as fruit, in the same container, whether insulated or otherwise, as basketball shoes; workout clothing such as socks, shorts and shorts; a basket ball, soccer ball, or football, and a sandwich or drink for later consumption. In the first instance a drink, or juicy piece of fruit, may leak over the sporting equipment. In the second instance, food carried with sports clothing and athletic shoes, and having spent a morning or afternoon in a sports locker, or the trunk of a car, may not acquire an overly palatable taste. In terms of keeping a cool drink cool, or a hot drink hot, it may be desirable to have an insulated, watertight container. Further, the transportation of perishable foods may call for the use of an insulated container in the interests of health and sanitation.

It may not be that only cooled beverages or snacks are desired. Bowls are often played well into the autumn. After an evening on the greens there may be a chill in the air, and tea or hot chocolate may be desired. In that light, an insulated container, such as a cooler, may also serve to keep items warm.

It would be advantageous to employ a single carrying container combining spaces for both sporting gear on the one hand, and insulated refreshments on the other, and to maintain a level of segregation between the spaces.

Heretofore, a typical solution has been to transport the items in two separate containers: one insulated, the other not. Unfortunately this is usually a cumbersome arrangement which may require two hands rather than one. A single person may not need or desire an entire large cooler. There is a need for a personal carrying container, such as

gym bag, that permits the carriage of sporting equipment while at the same time permits the carrying of drinks or foods that require or benefit from cooling, the two items being carried in a relatively convenient, and reasonably hygienic manner.

SUMMARY OF THE INVENTION

In an aspect of the invention, there is a combination comprising a gym bag, and a cooler mounted to said gym bag.

In an additional feature of that aspect of the invention, the cooler has a soft-shell flexible insulated wall structure. The insulated wall structure defines an insulated chamber. In another additional feature, the insulated wall structure is moveable to a collapsed position, and has means for securing the insulated wall structure in the collapsed position. In a still further additional feature, the gym bag has an uninsulated wall structure. In still another further additional feature, the gym bag is moveable to a collapsed position and has means for securing the gym bag in the collapsed position.

In yet another additional feature of that aspect of the invention, the gym bag is moveable to a collapsed position and has means for securing the gym bag in the collapsed position thereof. The insulated cooler is moveable to a collapsed position and has means for securing the cooler in the collapsed position thereof. In still another additional feature, the gym bag has a pair of end walls and a sidewall extending between the end walls. The cooler is mounted to one of the end walls. In still yet another additional feature, the gym bag has a pair of end walls and a sidewall extending between the end walls. The cooler is mounted to the sidewall.

In another additional feature of that aspect of the invention, the cooler has an insulated soft-shell wall structure defining an insulated chamber. The cooler has a receptacle mounted to the soft-shell wall structure. The receptacle extends inwardly of the wall structure relative to the insulated chamber. The receptacle is accessible from outside the chamber. In yet another additional feature of that aspect of the invention, a covering is mounted to the cooler. The covering is movable to a position overlying the receptacle.

In another additional feature of that aspect of the invention, the gym bag has a first soft-shell wall structure having a longitudinal extent, namely a length, a depth transverse to the length, and a width transverse to both the length and the width. The length is

greater than each of the depth and the width. The wall structure has a pair of longitudinally spaced apart ends and a sidewall member extending therebetween to define a first enclosure. The first soft shell wall structure is moveable between a collapsed position and an expanded position. The sidewall member has a lower portion upon which the first soft-shell wall structure can rest, and an upper portion having a closure member. The closure member extends at least partially longitudinally, and is operable to control access to the first enclosure. The cooler has a second soft-shell wall structure. The second soft-shell wall structure has an insulating layer, and defines a second enclosure therewithin. The second enclosure is insulated. The cooler is movable to a collapsed position, and is securable in the collapsed position thereof. The cooler is mounted to one of the end walls of the gym bag.

In yet another feature of that aspect of the invention, the cooler has an externally accessible receptacle mounted thereto. The receptacle extends inwardly of the insulated wall structure relative to the second enclosure. In still another feature, the cooler has a cover. The cover is movable to a position to overlie the receptacle. In a further feature, the first soft shell structure has a stiffened panel for placement adjacent the lower portion thereof inside the first enclosure. In yet a further feature, the stiffened panel is foldable. In still yet a further feature, the first enclosure and the second enclosure share a common wall. In still a further feature, the cooler has a watertight liner mounted therein to discourage migration of liquids contained in the cooler from the cooler to the gym bag.

In yet a further feature of that aspect of the invention, the gym bag has a first soft-shell wall structure having a longitudinal extent, namely a length, a depth transverse to the length, and a width transverse to both the length and the width. The length is greater than each of the depth and the width. The wall structure has a pair of longitudinally spaced apart ends and a sidewall member extending therebetween to define a first enclosure. The first soft shell wall structure is moveable between a collapsed position and an expanded position. The sidewall member has a lower portion upon which the first soft-shell wall structure can rest, and an upper portion having a closure member, and a pair of spaced apart, opposed ascending portions intermediate lower and upper portions. The closure member extends at least partially longitudinally, and the closure member is operable to control access to the first enclosure. The cooler has a second soft-shell wall structure. The second soft-shell wall structure has an insulating layer, and defines a second enclosure therewithin. The second enclosure is insulated. The cooler is movable to a collapsed position, and is securable in the collapsed position thereof. The cooler is mounted to one of the ascending portions of the gym bag.

In another aspect of the invention, there is a flexible soft-sided container assembly. The container assembly has a wall structure having a first portion and a second portion mounted thereto. The first portion has an uninsulated wall structure defining a first chamber therewithin. The second portion has an insulated wall structure defining a second insulated chamber therewithin. The uninsulated wall structure has a longitudinal extent, namely a length, a vertical extent, namely a depth, and an extent transverse to both the length and depth, namely a width. The length is greater than each of the depth and the width. The uninsulated wall structure has a pair of longitudinally spaced end walls, and a sidewall extending therebetween. The insulated wall structure is mounted to one of the end walls.

In an additional feature of that aspect of the invention, the insulated container has a height, a width, and a depth. The depth of the uninsulated wall structure is at least as great as the height of the insulated container assembly. The width of the uninsulated container structure is at least as great as the width of the container assembly. The depth of the insulated container structure is less than each of the width and the depth of the insulated container structure.

Other aspects and features of the present invention will become apparent to those ordinarily skilled in the art upon review of the following description of the preferred embodiment of the invention in conjunction with the accompanying figures.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure **1a** is a general assembly isometric view of a container assembly;

Figure **1b** shows a top view of the container assembly of Figure **1a** with a gym bag and a cooler in extended positions;

Figure **1c** is a left hand side view of the container assembly of Figure **1a**;

Figure **1d** is a right hand side view of the container assembly of Figure **1a**;

Figure **1e** is a view of an end of the container assembly of Figure **1a**, being the cooler end face;

Figure **1f** is a view of another end of the container assembly of Figure **1a**, being the gym bag end face;

Figure **1g** is a bottom view of the container assembly of Figure **1a**;

Figure **2a** is a detail view of the container assembly of Figure **1a** showing a pouch of the gym bag end in an open position;

Figure **2b** is a detail view of the container assembly of Figure **1a**, showing a lid of the cooler in an open position;

Figure **2c** shows a view of a liner of the cooler of Figure **1a** in an inverted position;

Figure **2d** is a scab view illustrating the wall construction of the cooler portion of the container assembly of Figure **1a**;

Figure **3a** shows an isometric view of the container assembly of Figure **1a** in a collapsed position;

Figure **3b** shows a top view of container assembly **20** with a gym bag and a cooler in extended positions, the gym bag being partially open;

Figure **3c** is a left hand side view of the container assembly of Figure **3a**;

Figure **3d** is a right hand side view of the container assembly of Figure **3a**;

Figure **3e** is a view of an end of the container assembly of Figure **3a**, being the cooler end face;

Figure **3f** is a bottom view of the container assembly of Figure **3a**;

Figure **4a** shows an isometric view of the container assembly of Figure **1a** with the cooler in a collapsed position and the gym bag in an extended position;

Figure **4b** shows an isometric view of the container assembly of Figure **1a** with the cooler in an extended position and the gym bag in a collapsed position;

Figure **5a** shows an alternate container assembly to the container assembly of Figure **1a**, having externally accessible receptacles mounted in the cooler;

Figure **5b** is a cross-sectional view showing the wall construction of the receptacles of Figure **5a**;

Figure **6** shows an isometric view of an alternative embodiment of container assembly to the container assembly of Figure **1a**, having a side mounted cooler;

Figure **7** shows an isometric view of an alternate embodiment to the container assembly of Figure **1a** with a gym bay of round cross-section;

Figure **8a** shows an isometric view of a further alternative embodiment of container assembly to the container assembly of Figure **1a**; and

Figure **8b** shows a reverse isometric view of the container assembly of Figure **8a**.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The description that follows, and the embodiments described therein, are provided by way of illustration or example, or examples of particular embodiments of the principles of the present invention. These examples are provided for the purposes of

illustration, and not of limitation, of those principles and of the invention. In the description that follows, like parts are marked throughout the specification and drawings with the same respective reference numerals. The drawings are not necessarily to scale and in some instances proportions may have been exaggerated in order to more clearly depict certain features of the invention.

Generally, as shown in Figures **1a** - **1g**, a soft-sided container assembly is generally illustrated as **20**. It has two sections: a general container section in the nature of an uninsulated, soft sided athletic or recreational activity bag of greater length than height or width, exemplified by a gym bag indicated as **22**, and an insulated section, in the nature of a cooler **24**. Gym bag **22** and cooler **24** are connected in such a manner as to make them easy to carry through the use of left and right hand carrying handles **25**, **26** or a shoulder strap **27**. In the preferred embodiment, gym bag **22** and cooler **24** are each independently collapsible, and can be secured in a respective collapsed position. This permits either section to be independently be collapsed while permitting use of the other section. Also, both cooler **24** and gym bag **22** can be collapsed at the same time to facilitate storage or transportation when not in use.

Considering the illustrations in greater detail, Figure **1a** is a perspective view of container assembly **20** in a fully extended configuration, that is, in which gym bag **22** and cooler **24** are moved to respective fully extended positions. Figure **1b** shows a top view of container assembly **20** with the general container section, gym bag **22**, open. Gym bag **22** has a lower, or bottom portion, namely a generally rectangular floor **28**, a pair of left and right hand ascending sidewall portions **30**, **32** rising upwardly from floor **28**, and an upper or top portion **34** extending between the upper margins of sidewall portions **30** and **32** above floor **28**. Floor **28**, sidewall portions **30**, **32** and top portion **34** collectively form a structure that, when moved to the extended position shown in Figure **1a**, has the form of a cylinder of generally rectangular cross-section. The central axis of the cylindrical structure so formed, indicated as **35**, is the longitudinal axis of container assembly **20**. A common wall, or dividing wall, such as might be termed a partition, bulkhead or panel **36** of generally rectangular plan form is located to one end of the rectangular cylinder, and is joined about its periphery to first longitudinal margins of floor **28**, sidewall portions **30**, **32** and top portion **34**, and thereby defines an end wall of gym bag **22**. Another end wall, or bulkhead, indicated as end panel **38**, of similar plan form to panel **36**, is joined about its periphery to second, distal margins of floor **28**, sidewall portions **30**, **32** and top portion **34**, and thereby defines another end wall of gym bag **22**.

Panels **36**, **38** and floor **28**, sidewall portions **30**, **32** and top portion **34** co-operate to define a first space, storage chamber or cavity, indicated generally as **40**. Top portion **34** has a pair of verges that are, structurally, inward extensions of sidewalls **30**, **32** that lean inwardly from the upper regions of sidewalls portions **30**, **32** toward each other, and a closure member **42** running longitudinally along the inboard edge of the verges between the panels **36** and **38**. Closure member **42** has a pair of parallel longitudinal track fasteners, in the nature of zippers, **43**, **44** bounding a central flap **45**. Zippers **43** and **44** are operable to provide access, through an opening **50**, to cavity **40**. Floor **28**, side walls **30**, **32** and end panels **36**, **38** are all made from a lightweight, durable and flexible water-resistant or water-proof material, and are sewn together, although other fastening methods could also be used.

Opening **50** runs along the longest dimension of general container **54**, being its length. Opening **50** of cavity **40** is equal in dimension to the length of flap **45**, whose proximal end is sewn to the top of end wall panel **36**. Flap **45** is flexible, and easily movable to provide access to cavity **40**. The distal end **52** of flap **45** has an hook-and-eye connector strip **54** (typically made of Velcro (T.M.)), which mates with a similar connector strip (not shown) on a cover flap **56**. Flap **56** is sewn to the top of common wall **36**.

In Figure **1c**, when zippers **43** and **44** are in their closed position, flaps **45** and **56** fill the entire opening, namely opening **50**. The two halves of zipper **43** are sewn respectively into the verges extending inward from sidewall **30**, and the edge of flap **45**; and the two halves of zipper **44** are sewn into the verge extending inwardly from side wall **32** and the other side edge of flap **45**. Tabs **64** and **66** of zippers **43** and **44**, respectively, are connected by a thin strap **68**, permitting zippers **43** and **44** to be easily and simultaneously operated.

Lifting, or carrying, members in the nature of handles **70** and **72** are attached to respective side wall portions **30** and **32**, the handles being formed of strapping secured at either end and having a seamed bail 73. The strapping material of handles **70** and **72** is carried fully under floor **28** and up the other side such that handles **70** and **72** are formed from a continuous loop of webbing material. The bails of handles **70** and **72** can be clasped together in a single hand.

Gym bag **22** has peripheral skirts **74** and **76** that are mounted about the periphery of end panels **36** and **38** respectively, and which extend longitudinally inboard therefrom.

The most inboard edges of skirts **74** and **76** carry respective halves of **78** and **79** of a tracked closure member in the nature of a zipper **80**, whose operation is described more fully below. Zipper halves **78**, **79** extend around the circumference of container side wall **30**, floor **28** and side wall **32**.

A pocket **82** is mounted to sidewall **30** and has an upper edge having a longitudinal tracked closure member in the nature of zipper **84**. Pocket **82** has an open mesh outer panel such that objects in pocket **82** can be seen, and so that pocket **82** can breathe. Other pocket panel materials could also be used.

At the distal end of gym bag **22**, that is to say, at panel **38** distant from cooler **24**, gym bag **22** has a flap **86** that is sewn about its bottom edge, and lower portions of its side edges to a thin peripheral wall **88** that extends outwardly from panel **38**. The remainder of the periphery of flap **86** is releasably attached to panel **38** by a zipper **90** that runs along the remaining, upper portions of the side edges, and across the top edge of flap **86**. Zipper **90** is operable to control access to the end pouch **87** thus formed. On the outer face of end panel **38**, concealed by flap **86** when zipper **90** is closed, is an internal pouch **92** having a divider member **93**, an outer, screen-mesh pouch **94**, pen holders **95**, and a key holder **96** having a quick release spring catch.

Another lifting member is provided in the nature of long, rectangular strap **27** of webbing material with releasable attachment fittings in the nature of clasps **102** and **104**, located at either end thereof. In the preferred embodiment, strap **100** has a closable pouch **106** slidably attached to a medial portion thereof, and also has a plastic shoulder brace **108** slidably attached thereto. Clasps **102** and **104** can be attached to lifting members mounted to the body of container assembly **20**, namely lifting lugs, or eyelets **110** and **112**, which are attached, respectively, to a sewn in web loop **114** mounted centrally at the top edge of panel **36**, and to a distal web loop sewn to external flap **86**. When clasps **102** and **104** are attached to eyelets **110** and **112**, carrying container assembly **20** can be carried by strap **100**.

A bottom panel liner in the nature of a floor board, is indicated in Figure **1a** as **120**. It is made of a pair of stiff rectangular pieces **122**, **124** of material, overlain with a fabric, and having a medial transverse hinge **126** to permit floor board **120** to be folded. Each of pieces **122**, **124** is of a width slightly less than the width of end panel **36** or **38**, and of a longitudinal extent less then the height of end wall panel **36** or **38**, such that, when folded, floor board **120** can lie against, and within the peripheral profile of, either

panel **36** or **38**. Floor board **120** is inserted through opening **50** and placed to lie on floor panel **28**, thus tending to provide a measure of rigidity, and puncture resistance, to floor **28** of gym bag **22**.

In the preferred embodiment, gym bag **22** is roughly 16 inches long (40 cm), with a height of roughly 10 inches (25 cm) and a width of roughly 10 inches (25 cm). The corners of end panels **36** and **38** are radiused, and portions **28**, **30**, **32** and **34** conform to the radiused profile so defined.

Cooler **24** will now be described in greater detail. Cooler **24** has a bottom panel, or floor **142**; side walls **144** and **146** upstanding from floor **142** and substantially in line with side wall portions **30**, **32** of gym bag **22**; an end wall **148** distant from wall panel **36**, also upstanding from floor **142** and meeting side walls **144** and **146** at common vertices; and wall panel **36** itself. Floor **142** , walls **144** and **146** and **148** and panel **36** define a second storage chamber, or cavity **150**. The upper margins, being top edges **162**, **164**, and **166** of walls **144**, **146**, **148** and panel **36** define an opening **151** of cavity **150**. A lid **152** is directly connected to panel **36** by a folded fabric hinge **153**. A zipper **154** releasably connects lid **152** to the upper margins of side walls **144** and **146** and end wall **148**. When zipper **154** is unzipped, lid **152** can be folded back to permit entry and exit of objects from cooler **24**. The inside surfaces of floor **142**, side walls **144** and **146**, end wall **148**, common wall panel **36**, and lid **152** forming the bounds of cavity **150** are covered in a shiny, reflective surface.

Top edges **162**, **164** and **166** form the rim **168** of cavity **150**. On the inside of rim **168** is a liner securing means, or liner attachment mounting, in the nature of a zipper **170**, which, in the embodiment illustrated, includes portions **171**, **172** and **173** mounted respectively to side walls **144** and **146**, and end wall **148**, and a hook-and-eye fabric fastener strip **176** mounted to common wall panel **36**. Although this arrangement is preferred, in an alternative embodiment all of strip portions **171**, **172**, **173** and **176** (or some other combination of them) could be hook-and-eye fasteners. Other types of mounting could be used, in addition to zippers, such as interlocking strip seals, snaps, clips, grommets or other means.

Figure **2d** shows a cross section of end wall **148** with a liner **180** in place. A scab section of side wall **144** is also shown for the purpose of revealing its layers of construction. With the exception of auxiliary pouch **182**, this section is typical not only of end wall **148** but also, more generally, of panel **36**, side walls **144** and **146**, bottom panel

142 and lid **152**. The outer facing layer of end wall **148** is a woven nylon covering layer **184** for resisting abrasion. It overlays a closed cell foam insulation layer **186**. The inner face of insulation layer **186** is covered by a flexible plasticised reflective sheeting **188**. Liner **180** seats inside sheeting **188**, and, in use, is pressed against it by the objects it contains.

Liner **180** is made from a membrane, or web, preferably from flexible, transparent stock such as static cling vinyl, and as such, is impermeable to water or other liquids such as beverages, juice from fruit, leaking jam or peanut butter, and so on. Liner **180** has a floor **190** and sides **192**, **193**, **194**, and **195** extending upwardly from floor **190**. Each of sides **192**, **193**, **194** and **195** is joined to floor **190** at a floor edge **196**, **197**, **198** and **199**, respectively, and each has an opposite or distal edge **200**, **201**, **202** and **203**, respectively, distant from its respective floor edge. In this way a complete water-tight lining is provided for cavity **150**.

Liner **180** has a peripheral lip **204** formed collectively by distal edges **200**, **201**, **202** and **203**. Immediately below lip **204** are liner support fasteners, mounted to some or all of sides **192**, **193**, **194** and **195**. This mounting may be by heat welding or by use of a bonding agent or adhesive. In the preferred embodiment lip **204** is folded over to form a hem, and fasteners **205**, **206** and **207** are of the nature of a continuous zipper around the three sides of lip **204**, and a fastener **208** in the nature of a fabric hook-and-eye strip is sewn in place at a height relative to floor **196** expected to be above the likely liquid level in liner **180**. In an alternative embodiment, fasteners **205**, **206** and **207** can all be replaced by fabric hook-and-eye fasteners each mounted on one side of lip **180**, and which mate with corresponding fabric hook-and-eye fasteners mounted to walls **144**, **146** and **148**. These fabric hook-and-eye fastener strips are commonly sold under the name Velcro (T.M.).

Figure **2b** shows liner **180** removed from cooler section **24**. Although liner **180** could be formed by heat-welding together floor **190** and sides **192**, **193**, **194** and **195**, it is preferable to construct liner **180** from a single integral sheet of material, folded to a watertight vessel as shown. This construction may tend to enhance durability during repeated foldings and un-foldings when cooler **24** is collapsed and expanded, as described below. It would also be desirable for liner **180** to be thin to better facilitate collapsing cooler **24**. It would also be preferable for liner **178** to be transparent to permit the shiny,

reflective surfaces of the inside surfaces of floor **142**, side walls **144** and **146**, end wall **148**, panel **36**, and lid **152** forming the bounds of cavity **150** to be seen.

Figure **2c** is a perspective view of container **20** with liner **180** inverted, or pulled out and its inside surfaces exposed, facilitating cleaning of liner **180** without removal from container **20**.

An elasticized retaining matrix **210** is located on top of lid **152**, and permits other materials such as cups, plates, serving utensils or other objects to be carried on top of cooler **24**. Eyelet **212** is located on side wall **144**, and a similarly placed eyelet **214** is located on side wall **146**. Eyelets **212** and **216** can connect with clasps **102** and **104** to attach strap **100** as a convenient carrying strap when gym bag **22** is in a collapsed position.

Insulated pouch **182** has an external pocket **220**, which may be made of mesh or other material. A horizontal strip of fabric and hook-and-eye fastener **222** is located on pocket **220**, and mates with a strip **224** located on the underside of lid **152** when cooler **24** is collapsed. Rectangular pieces of fabric hook-and-eye fastener **226** and **228** are located on insulated pouch **182**.

Securing straps **230** and **232** are attached to side walls **144** and **146** at their junction with panel **36**. Hook-and-eye strips **234**, **236** are located on side walls **144** and **146**, respectively to provide fastening points for mating hook-and-eye strips at the distal extremities of straps **230** and **232** when cooler **24** is in its extended position.

The use of hook-and-eye fasteners **226** and **228** when cooler **24** is collapsed is illustrated in Figure **3a**. End wall **148** is pushed toward common wall panel **36** with side walls **144** and **146** being folded inward thus collapsing cavity **150**. Zipper **154** is open, and fastener strip **224** under lid **152** is mated with fastener strip **222**. Straps **230** and **232** extend about cooler **24** to engage strips **226** and **228**, thus securing cooler **24** in a collapsed position.

When cooler **24** is fully collapsed and gym bag **22** is expanded as in Figure **4a**, container assembly **20** can be used as an equipment or gym bag, using the general storage space of gym bag **22**. Container assembly **20** in this configuration can be transported using shoulder strap **100** attached to eyelets **110** and **112**.

A top view of container assembly **20** with gym bag **22** collapsed and cooler **24** expanded is illustrated in Figure **4b**. Floor board **120** is folded, and placed flat against common wall panel **36**. End wall panel **38** is then pushed toward common wall panel **36** (with floorboard **120** in-between). This can be accomplished with zippers **43** and **44** open. Zipper **80** is then closed, enclosing handles **70** and **72**. Zipper **80** thus acts to secure the gym bag **24** in a fully collapsed position. Flap **78** is typically tucked in against end wall **36**, although this is not necessary. Note that in this configuration, the container **20** may be used as a cooler carried by using strap **110**.

A top view of container assembly **20** with both gym bag **22** and cooler **24** collapsed is illustrated in Figure **3a**. In this fully collapsed configuration, the container **20** takes up a reduced amount of space for storage or transportation.

A number of alternative embodiments are possible. Figure **5** shows a perspective view of an alternative embodiment of container assembly **250** with a gym bag **252** of circular cylindrical shape. Gym bag **252** has a cooler **254** and a general gym bag **256**. Cooler **254** is similar to cooler **24**, and notably has hook-and-eye strips **258** and **259** attached to end wall **260** of cooler **254**. Hook-and-eye strip **258** mates with hook-and-eye strip **259** attached to a strap **262**. There is also a hook-and-eye strip **264** which mates with a hook-and-eye strip (not shown) on the inside of lid **268**. Cooler **254** can thus move to a collapsed position, and can be retained, or secured, in the collapsed position by using hook-and-eye strips **258**, **259**, and **264** in a manner similar to cooler **24** of container assembly **20**.

Gym bag **256** is similar to gym bag **24**. The method of closure, while still running along the longest dimension of gym bag **256**, consists of a zipper **258**. Gym bag **256** is made from a flexible, durable, moisture-resistant and breathable material, so that it is possible to collapse gym bag **256** in a manner similar to that of gym bag **24**, described above. When collapsed, gym bag **256** is held in place by closing zipper **260**.

Figure **5a** shows an isometric view of a container assembly **280** having an overall parallelepiped shape. Container assembly **280** is substantially the same as container assembly **20** but also includes a cooler **282** having two externally accessible receptacles **300**, **302** for holding a beverage container. Container assembly **280** has cooler **282** and a gym bag **284**. Cooler **282** is similar to cooler section **24**. Gym bag **284** is similar to gym bag **22** and is made from a flexible, durable, moisture-resistant and breathable material, so

that it is possible to collapse gym bag **22** in a manner similar to that of gym bag **22**, described above. When collapsed, gym bag **22** is held in place by a closing zipper **288**.

Cooler **282** has a hinged lid **290** having openings **304** formed therethrough. Lid **290** like the other walls of cooler **282**, or cooler **24** has insulative properties in that heat transfer is retarded through lid **290**. An example of a suitable lid in this regard includes an internal core of foam **306**. Suitable foam polymers include ethylpropylene ethylene (EPE). A typical core will be about 8 mm thick. External to, or on opposite sides thereof, are an outer protective and decorative layer of polymer sheeting **308** and another inner protective layer of polymer sheeting **310**. Layers **308** and **310** are preferably made of a material suitable for cleaning. A suitable material in this regard is nylon (T.M.) sheeting. Other suitable materials and combinations of materials may also be found.

Each externally accessible receptacle **300**, **302** may take the general form desired for the particular end use. These include sleeves, pockets, cylinders and the like. Each such receptacle **300**, **302** includes a mouth **312**. In the illustrated embodiment, mouth **312** conforms to the shape of opening **304** and has a perimeter size slightly less than that of the opening **304**. Mouth **312** is selected to have a perimeter and size which closely approximates the external perimeter shape and size of the can, bottle, or the like to be held such as can **314**. Each receptacle **300**, **302** provides a downwardly depending structure which accommodates at least a substantial portion of the volume of the can, bottle or the like. Preferably, the height of the receptacle is less than the total height of the can, bottle or like, to permit and facilitate access to the can, bottle or like: that is, a user can grasp and remove the can, bottle, or the like, from receptacle **300**, **302** when desired, such as in order to drink or pour from can **314**.

The structure of receptacle **300**, **302** is illustrated in the scab cross-section of Figure **5b**. It includes a downwardly depending sidewall **316** which is generally vertically oriented when container cooler **282** is in the upright position illustrated in Figure **5a**. The illustrated receptacle **300**, **302** further includes a bottom wall **318** upon which can **314** or the like can rest. In the illustrated form, downwardly depending sidewall **316** has the configuration of a right cylinder, and the bottom wall **318** takes on the shape of a disk. This shaping is suited for closely accommodating illustrated can **314**.

Receptacles **300**, **302** are to be mounted integrally with lid **290** at openings **304**. Single–piece construction is possible in this regard, although often an assembly can be somewhat more convenient, particularly when the receptacle material is different from

that of lid **290**. As illustrated, a flange member **320** is used to join the receptacle to lid **290**. Illustrated flange member **320** includes a horizontal plate **322** which overlies the opening **304** and the adjacent edge of lid **290**. A plurality of fastening devices in the nature of flexing fasteners **324** project from the horizontal plate **322** and into and through the lid **290**. Horizontal backing plate **326** is included to enhance the security of the connection between fasteners **324** and lid **290**. In this regard, the fasteners **324** pass through respective openings provided in separate horizontal backing plate **326**. Fasteners **324** snap into place thereat.

Flange member **320** also includes a vertical annular leg **328** which depends downwardly from horizontal plate **322**. A cut-out or indent in the nature of a shouldered annular rabbet **330** is provided in receptacle sidewall **316** to accommodate the thickness and height of vertical annular leg **328**. By either approach, the exposed surface of the vertical plate is flush with the inside surface of receptacle sidewall **316**, or, alternatively vertical annular leg **328** is slightly indented with respect to receptacle sidewall **316**. The surface of receptacle **302** will thus engage the container when seated in receptacle **302**.

Another alternative embodiment of container assembly is shown in Figure **6**. A soft-sided container assembly **350** has a cooler **352** and a duffel, or gym bag **354**. Gym bag **354** is substantially similar in construction to the duffel bag, that is to say gym bag **24**, of Figure **1a**. However, rather than having panel **36**, which is insulated, gym bag **354** has a second end panel **356** which is of the same construction as end panel **38**, thus completing the boundary of the internal cavity of gym bag **365**.

By contrast to container assembly **20**, cooler **352** is mounted to a side wall portion **360** of gym bag **354**, in a saddle-bag like mounting, and has a rear insulated panel, in place of panel **36**, that forms the rearward wall of cooler **352**. The wall construction of cooler **352** is the same as cooler **22**, but employs a greater width, oriented to mount lengthwise relative to sidewall portion **360**, and lesser depth, extending roughly from the level of the floor of gym bag **24** to the base of handle **362**. As shown, cooler **352** also includes beverage container receptacles **364**, **366** of the same form of construction as receptacles **300**, **302** discussed above. Further, a cover, in the nature of a flap **368** extends outwardly from the juncture of cooler **352** with sidewall portion **360**. Flap **368** is positionable to cover containers seated in either of receptacles **364**, **366** and thereby to tend to protect then from rain, or sun, and or wind.

Figure 7 shows a further alternative embodiment of container assembly **380**, that differs from container assembly **20** by having a duffle bag, or gym bag, **382** that is of substantially round cross-section, rather than the more square cross-sectional configuration of gym bag **22**. An insulated wall structure, namely cooler **384** is mounted to an end wall **386**, of gym bag **382**, and is of a size to fall within the projected profile of endwall **386**. Although cooler **384** is box-shaped, having rectangular side wall, lid, and bottom wall panels, other shapes could be employed, and their profiles need not necessarily fall within the projected profile of the respective end wall of the gym bag. Further, a saddle-bag mounting along the side of a rounded gym bag could also be made. As shown in Figure 7, both gym bag **382** and cooler **384** are longitudinally collapsible in a manner similar to gym bag **22** and cooler **24**. Cooler **384** is secured in the collapsed position by hook-and-eye fasteners, in the manner described above, and bag **382** is secured in the collapsed position by circumferential zipper **388**.

More generally, the shape of the container assembly need not be square, as assembly **20**, or round, as assembly **380**, but could be oval, elliptical, partially flat sided (such as for a bottom face for resting on the floor), and partially arcuately sided, or some combination of flat and arcuate sides or large radius corners. A duffel bag or gym bag can have varying dimensions and proportions while still maintaining the relationship of having a major dimension, being the length, and minor dimensions for depth and width that are substantially less than the length.

Similar securement means is also provided to maintain the elements in their collapsed positions to that of the container assembly **20**. For each of the collapsible embodiments illustrated and described above, other types of securing means could be provided, whether a different arrangement of hook-and eye fasteners, the use of snaps or buttons, the use of zippers, or the use draw strings, or belts, or the use of elasticized bands such as bungee cords or the like.

A number of alternative configurations are possible, such as the addition of a cover in the nature of flap **368** to cooler **282**, or in the use of a cooler that lacks beverage receptacles, as in cooler **22**, or in the nature of a container assembly having coolers mounted along either side, as in a double saddle-bag arrangement, or in having coolers such as cooler **24**, or cooler **282**, mounted to both ends of a gym bag similar to gym bag **22** or gym bag **354**.

A further alternative embodiment is shown in Figures **8a** and **8b**. A container assembly **400** has a collapsible athletic gear bag **402** having a shape similar to a small valise or satchel, to which a collapsible insulated wall structure in the nature of a cooler **404** is mounted in a side mounting. Athletic gear bag **402** has a lower, floor, or bottom panel **406**, a top panel **408**, and a pair of symmetrical end walls **410**. Side wall panels **414** and **416** extend upwardly from bottom panel **406**, each having an upper portion **418**, **420**, that is tapered inward (that is, toward each other). A pair of carrying handles **422**, **424** are mounted to upper portions **418** and **420**, and have bails **426**, **428** that can be drawn together and grasped by a single hand. Bag **402** has a longitudinal tracked closure member, in the nature of a zipper **430** that extends longitudinaly along the center of top panel **408**, dividing it into two inwardly extending, co-operating verges **431**, **433**. Zipper **402** also extends partially down the end faces **410** such that when zipper **430** is open, upper portions **418**, **420** can be spread outwardly somewhat to facititate access to the interior of bag **402**. Bag **402** is of relatively soft-walled construction, although, in an alternative embodiment, side panels could be substantially rigid, or could have a degree of stiffening. Bag **402** is movable between collapsed and extended positions, but, in contrast to gym bag **22**, gym bag **402** is collapsible in a direction perpendicular to the longitudinal direction. That is, athletic gear bag **402** is collapsible, or expandible as the case may be, in the width direction as indicated by arrow '**A**', rather than in the length direction. As above, a means for securing bag **402** is provided, in the nature of hook-and-eye-strips **434**, **435**, **436** and straps **438**.

Cooler **404** has a bottom panel **442**, an outboard panel **444**, left and right hand side panels **446** and **448**, and a hingedly connected top panel **440**, with the same general construction as cooler **24** or **352**, including a water proof liner similar in construction to liner **180**. Beverage receptacles, such as receptacles **300**, **302** could also be installed in the lid, namely top panel **440**, in the manner shown in Figure **5a** and **5b**, above. Cooler **404** is also collapsible in the direction of the width of bag **402**, being movable between collapsed and extended positions, and has securing means, in the nature of straps **441** and hook-and-eye fasteners **443**, **445** in an analogous manner to that described above.

Container assembly **400** differs from container assembly **20** in having a different aspect of height to width, the height being greater than the width, typically by 20 to 60 %. For example, the width may be in the range of for example, about 8 - 10 inches (20 - 25 cm) while the height is in the range of 10 or 12 to 16 inches (25 or 30 to 40 cm). The aspect ratio of height to length may also be lower, the length being typically 18 to 24 inches (45 - 60 cm). As seen in the reverse view of container assembly **400**, such a

container assembly can also have, optionally, an external equipment mounting, **452**. As shown, external equipment mounting **452** is a racquet housing **454**, such as would be suitable for racquet ball, tennis, badminton, or squash. A similar bag, without a racquet housing or mount, could be used for other sporting or recreational activities, whether as a collapsible picnic case, as a case for lawn bowls (with suitable internal dividers) or bocce balls. Alternatively, a second cooler, like cooler **404**, can be mounted in place of equipment mounting **452**. In this regard, while the term "cooler" has been used above, it is intended that the principles of the invention may apply to insulated wall structures that maintain warmth as well as those that maintain coolness.

A preferred embodiment has been described in detail and a number of alternatives have been considered. As changes in or additions to the above described embodiments may be made without departing from the nature, spirit or scope of the invention, the invention is not to be limited by or to those details.

CLAIMS

I claim:

1. A combination comprising a gym bag, and a cooler mounted to said gym bag.

2. The combination of claim 1 wherein said cooler has a soft-shell flexible insulated wall structure, said insulated wall structure defining an insulated chamber.

3. The combination of claim 2 wherein said insulated wall structure is moveable to a collapsed position, and has means for securing said insulated wall structure in said collapsed position.

4. The combination of claim 1 wherein said gym bag has an uninsulated wall structure.

5. The combination of claim 1 wherein said gym bag is moveable to a collapsed position and has means for securing said gym bag in said collapsed position.

6. The combination of claim 1 wherein:
said gym bag is moveable to a collapsed position and has means for securing said gym bag in said collapsed position thereof; and
said insulated cooler is moveable to a collapsed position and has means for securing said cooler in said collapsed position thereof.

7. The combination of claim 1 wherein:
said gym bag has a pair of end walls and a sidewall extending between said end walls; and
said cooler is mounted to one of said end walls.

8. The combination of claim 1 wherein:
said gym bag has a pair of end walls and a sidewall extending between said end walls; and
said cooler is mounted to one of said end walls and said sidewall.

9. The combination of claim 1 wherein said cooler has an insulated soft-shell wall structure defining an insulated chamber, and said cooler has a receptacle mounted to said

soft-shell wall structure, said receptacle extending inwardly of said wall structure relative to said insulated chamber, said receptacle being accessible from outside said chamber.

10. The combination of claim 9 wherein a covering is mounted thereto, said covering being movable to a position overlying said receptacle.

11. The combination of claim 1 wherein:

said gym bag has a first soft-shell wall structure having a longitudinal extent, namely a length, a depth transverse to said length, and a width transverse to both said length and said width, said length being greater than each of said depth and said width;

said wall structure has a pair of longitudinally spaced apart ends and a sidewall member extending therebetween to define a first enclosure;

said first soft shell wall structure is moveable between a collapsed position and an expanded position;

said sidewall member has a lower portion upon which said first soft-shell wall structure can rest, and an upper portion having a closure member;

said closure member extends at least partially longitudinally, and is operable to control access to said first enclosure;

said cooler has a second soft-shell wall structure, said second soft-shell wall structure having an insulating layer, and defining a second enclosure therewithin, said second enclosure being insulated;

said cooler is movable to a collapsed position, and is securable in said collapsed position thereof; and

said cooler is mounted to one of said end walls of said gym bag.

12. The combination of claim 11 wherein said cooler has an externally accessible receptacle mounted thereto, said receptacle extending inwardly of said insulated wall structure relative to said second enclosure.

13. The combination of claim 12 wherein said cooler has a cover, said cover being movable to a position to overlie said receptacle.

14. The combination of claim 11 wherein said first soft shell structure has a stiffened panel for placement adjacent said lower portion thereof inside said first enclosure.

15. The combination of claim 14 wherein said stiffened panel is foldable.

16. The combination of claim 11 wherein said first enclosure and said second enclosure share a common wall.

17. The combination of claim 11 wherein said cooler has a watertight liner mounted therein to discourage migration of liquids contained in said cooler from said cooler to said gym bag.

18. The combination of claim 1 wherein:

said gym bag has a first soft-shell wall structure having a longitudinal extent, namely a length, a depth transverse to said length, and a width transverse to both said length and said width, said length being greater than each of said depth and said width;

said wall structure has a pair of longitudinally spaced apart ends and a sidewall member extending therebetween to define a first enclosure;

said first soft shell wall structure is moveable between a collapsed position and an expanded position;

said sidewall member has a lower portion upon which said first soft-shell wall structure can rest, and an upper portion having a closure member, and a pair of spaced apart, opposed ascending portions intermediate lower and upper portions;

said closure member extends at least partially longitudinally, and said closure member is operable to control access to said first enclosure;

said cooler has a second soft-shell wall structure, said second soft-shell wall structure having an insulating layer, and defining a second enclosure therewithin, said second enclosure being insulated;

said cooler is movable to a collapsed position, and is securable in said collapsed position thereof; and

said cooler is mounted to one of said ascending portions of said gym bag.

19. The combination of claim 18 wherein said cooler has an externally accessible receptacle mounted thereto, said receptacle extending inwardly of said insulated wall structure relative to said second enclosure.

20. The combination of claim 18 wherein said cooler has a cover, said cover being movable to a position to overlie said receptacle.

21. The combination of claim 18 wherein said first soft shell structure has a stiffened panel for placement adjacent said lower portion thereof inside said first enclosure.

22. The combination of claim 21 wherein said stiffened panel is foldable.

23. The combination of claim 18 wherein said first enclosure and said second enclosure share a common wall.

24. The combination of claim 18 wherein said cooler has a watertight liner mounted therein to discourage migration of liquids contained in said cooler from said cooler to said gym bag.

25. A flexible soft-sided container assembly comprising:

a wall structure having a first portion and a second portion mounted thereto;

said first portion having an uninsulated wall structure defining a first chamber therewithin;

said second portion having an insulated wall structure defining a second, insulated chamber therewithin;

said uninsulated wall structure having a longitudinal extent, namely a length, a vertical extent, namely a depth, and an extent transverse to both said length and depth, namely a width;

said length being greater than each of said depth and said width;

said uninsulated wall structure having a pair of longitudinally spaced end walls, and a sidewall extending therebetween; and

said insulated wall structure is mounted to one of said end walls.

26. The flexible soft sided container assembly of claim 25 wherein:

said insulated container has a height, a width, and a depth;

said depth of said uninsulated wall structure is at least as great as said height of said insulated container assembly;

said width of said uninsulated container structure is at least as great as said width of said container assembly, and

said depth of said insulated container structure is less than each of said width and said depth of said insulated container structure.

27. The flexible, soft-sided container assembly of claim 25 wherein said insulated wall structure has an externally accessible receptacle mounted thereto, said receptacle extending inwardly of said insulated wall structure relative to said insulated chamber.

28. The flexible, soft-sided container assembly of claim 27 wherein said insulated container structure is movable to a collapsed position, and is securable in said collapsed position.

29. The flexible, soft-sided container assembly of claim 27 wherein said uninsulated container structure is movable to a collapsed position, and is securable in said collapsed position.

30. The flexible, soft-sided container assembly of claim 27 wherein:

said insulated container structure is movable to a collapsed position, and is securable in said collapsed position thereof; and

said uninsulated container structure is movable to a collapsed position, and is securable in said collapsed position.

31. The flexible, soft-sided container assembly of claim 1 wherein said insulated container structure has a

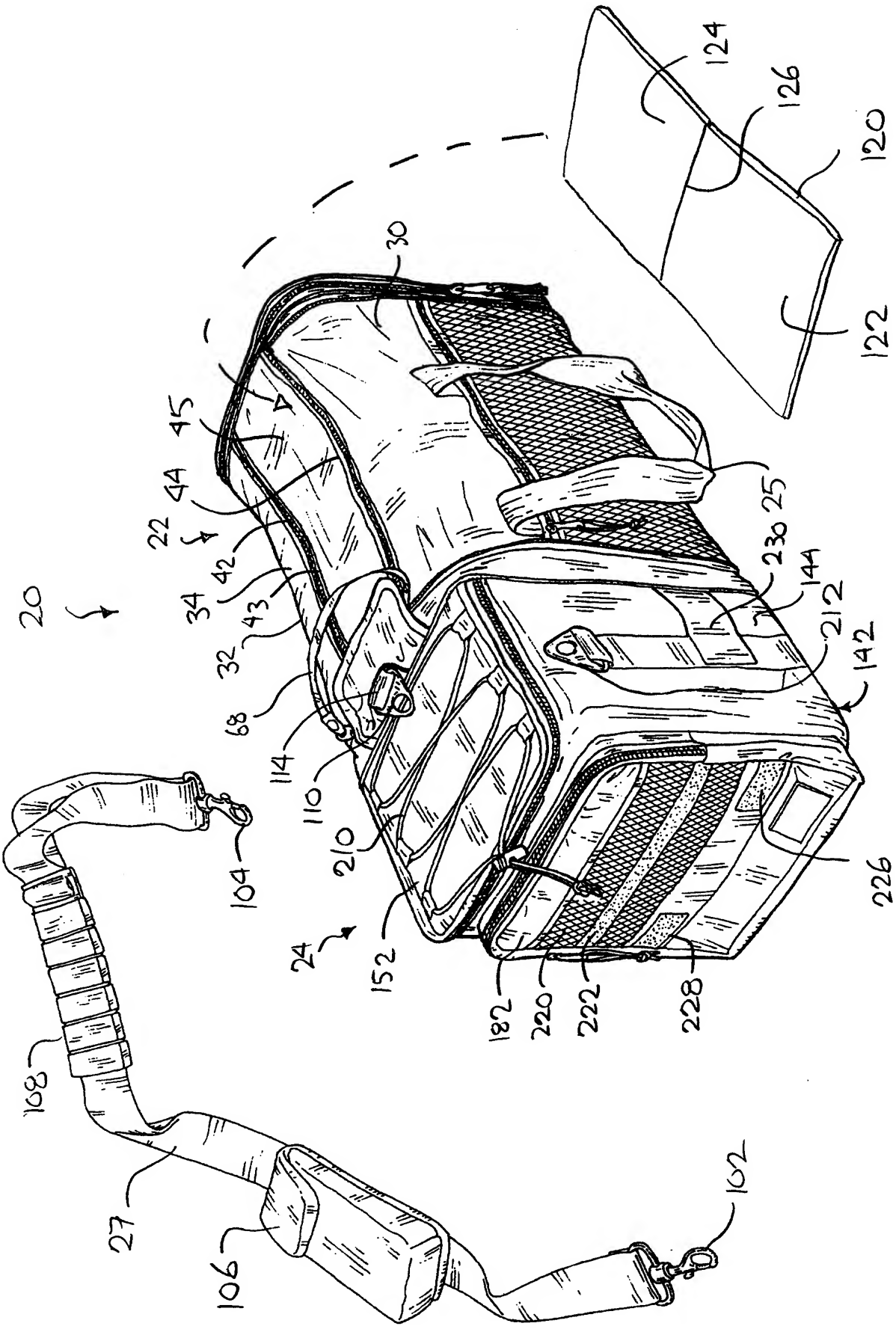
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Figure 1a

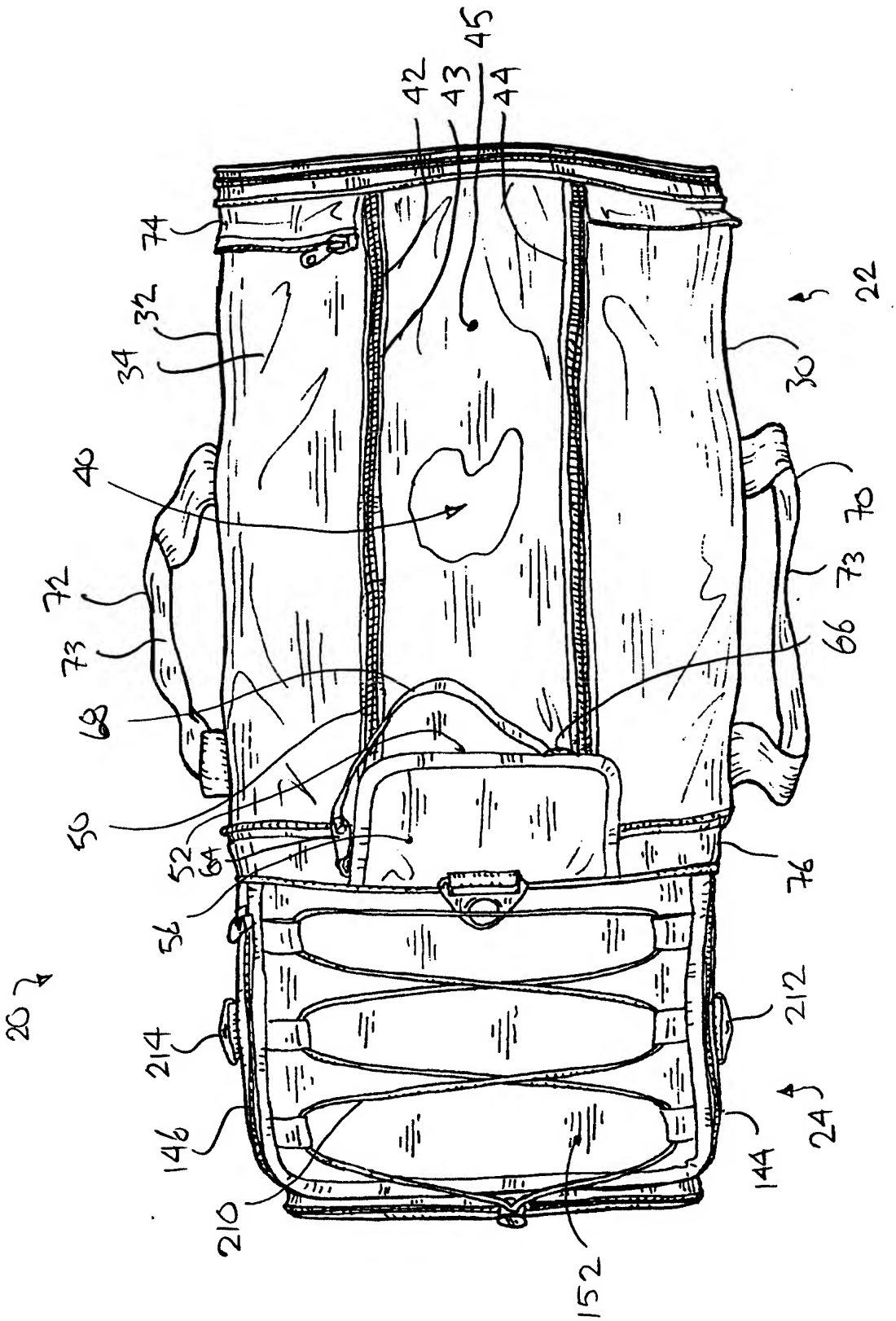
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Figure 1b

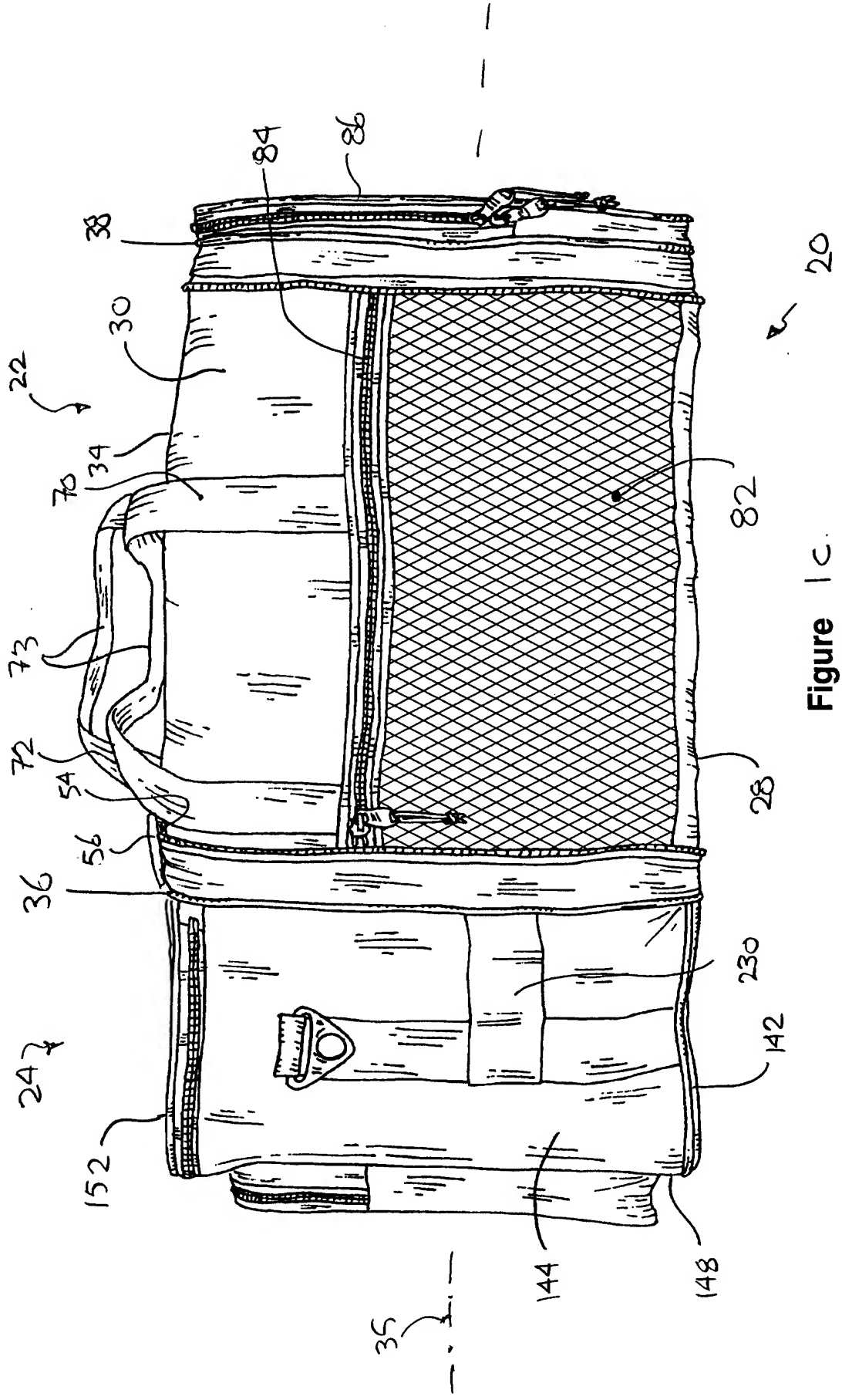

Figure 1C.

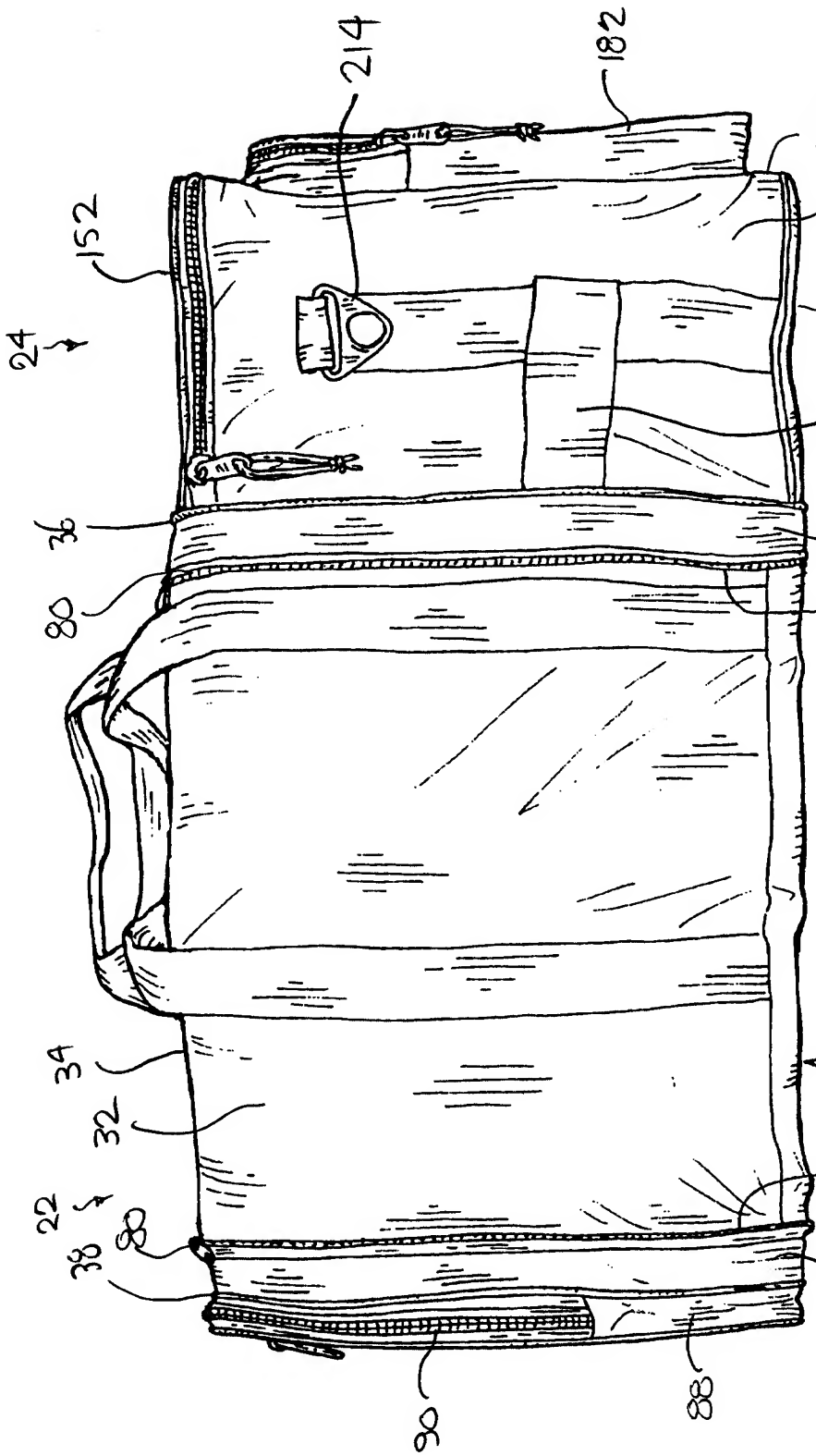
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Figure 1d

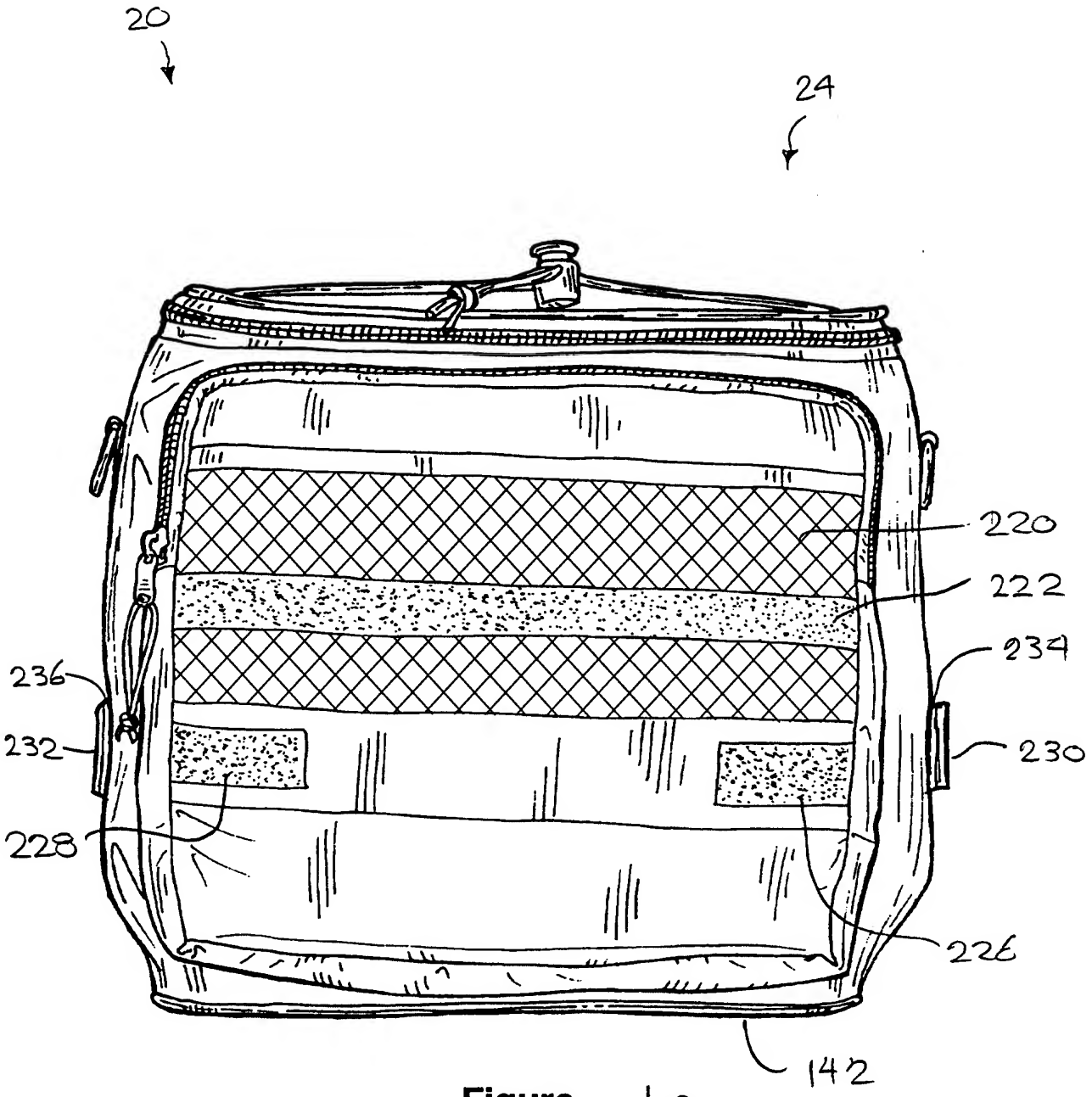

Figure 1e

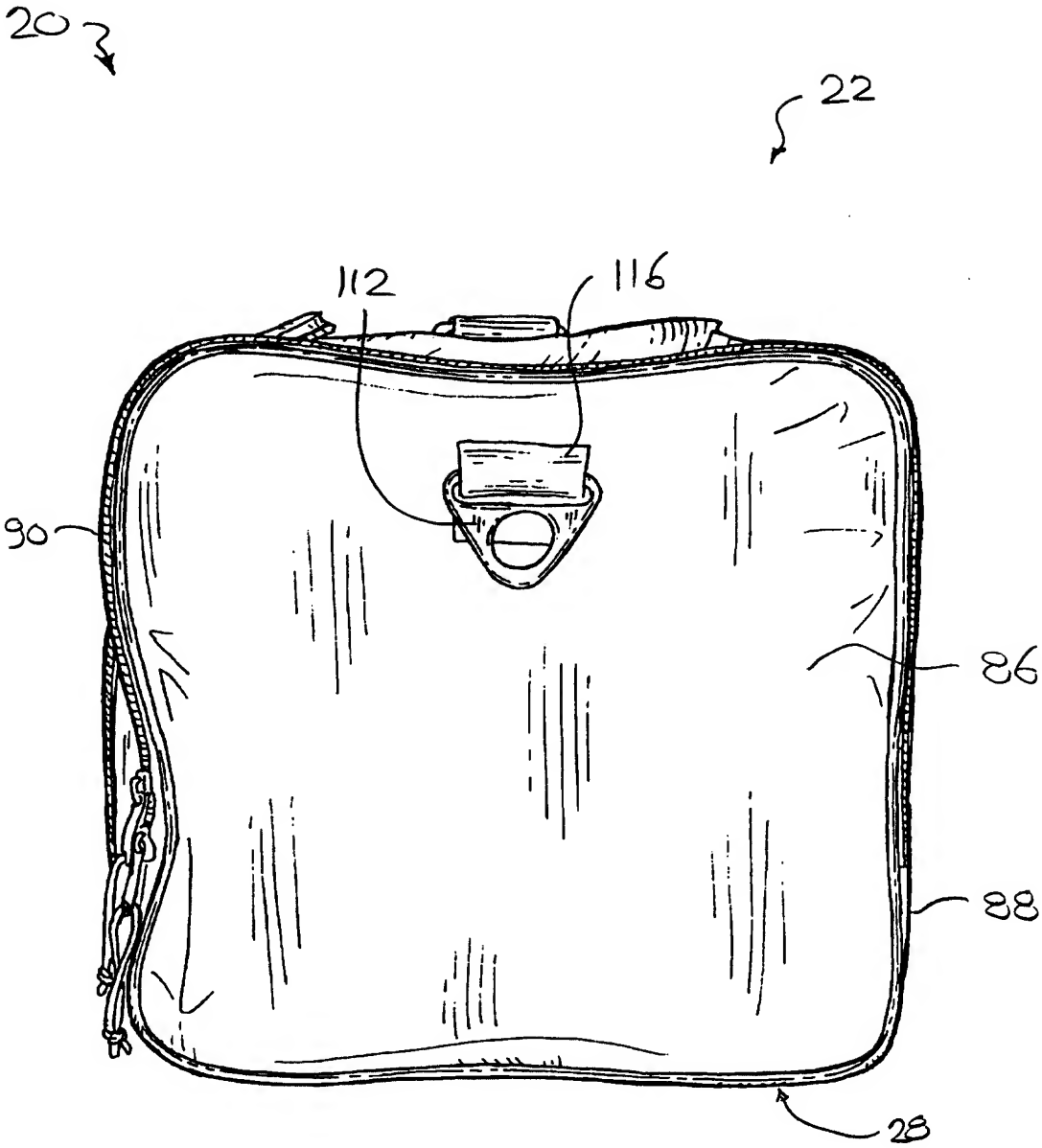

Figure 1f

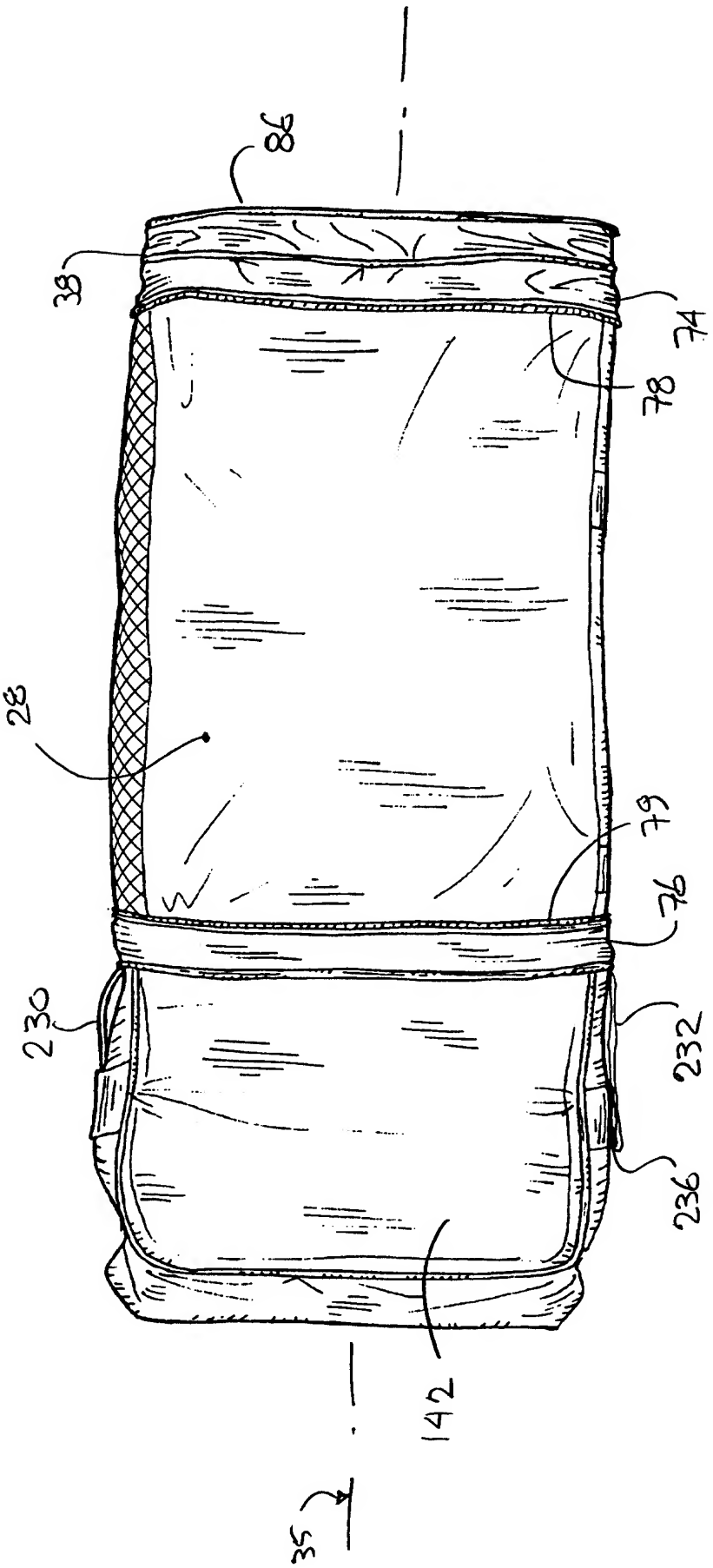

Figure 19

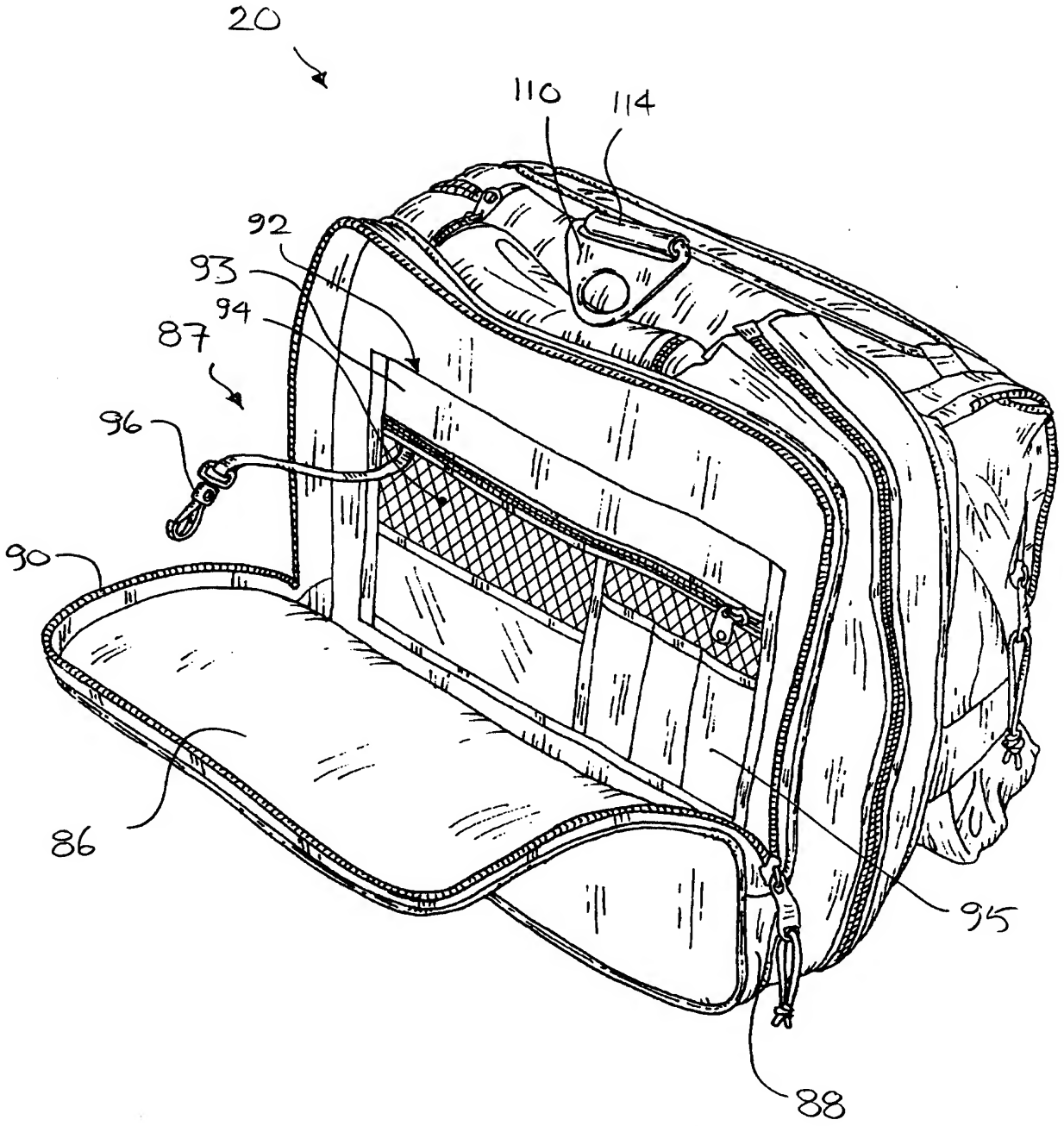

Figure 2a

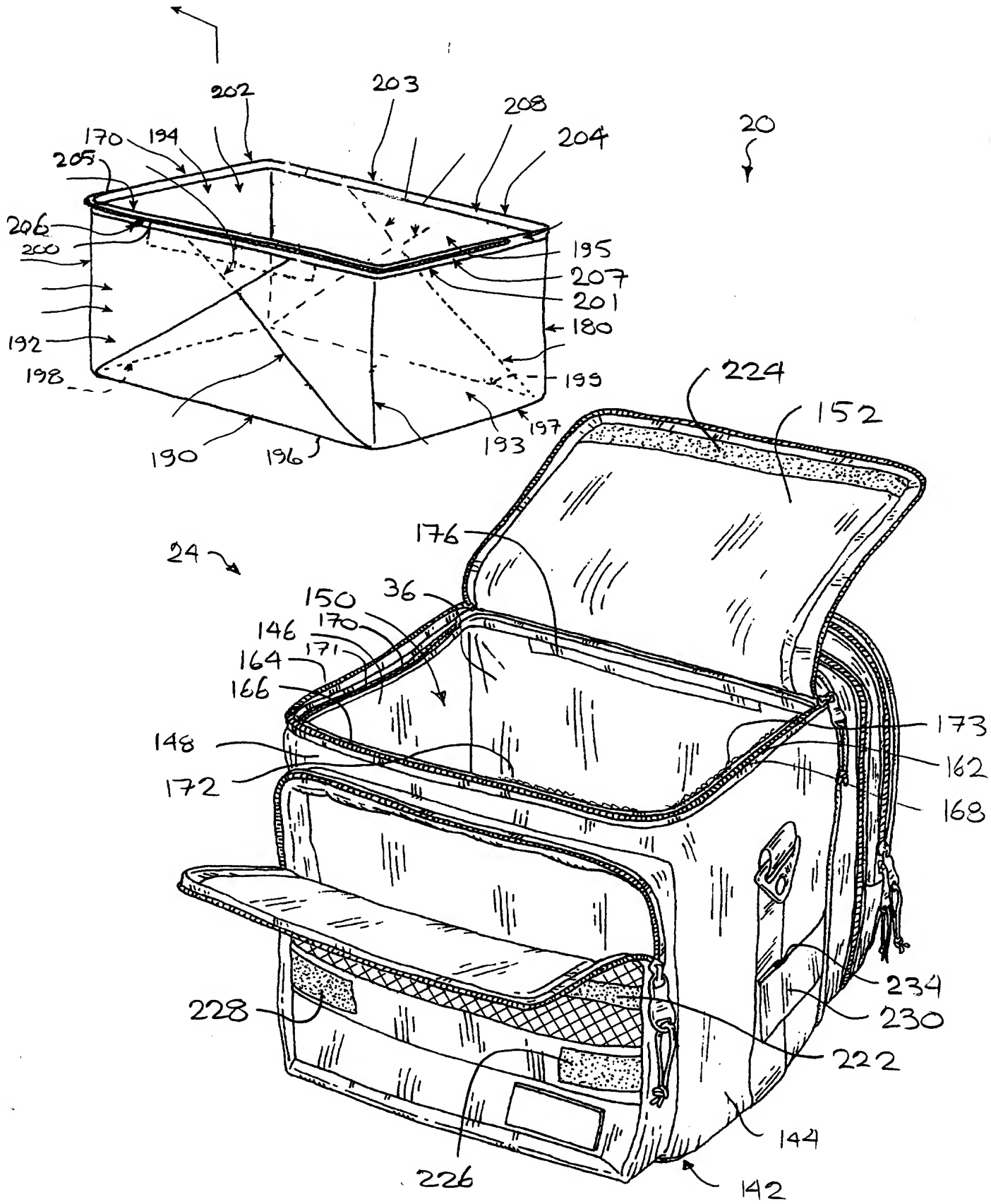
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Figure 2b

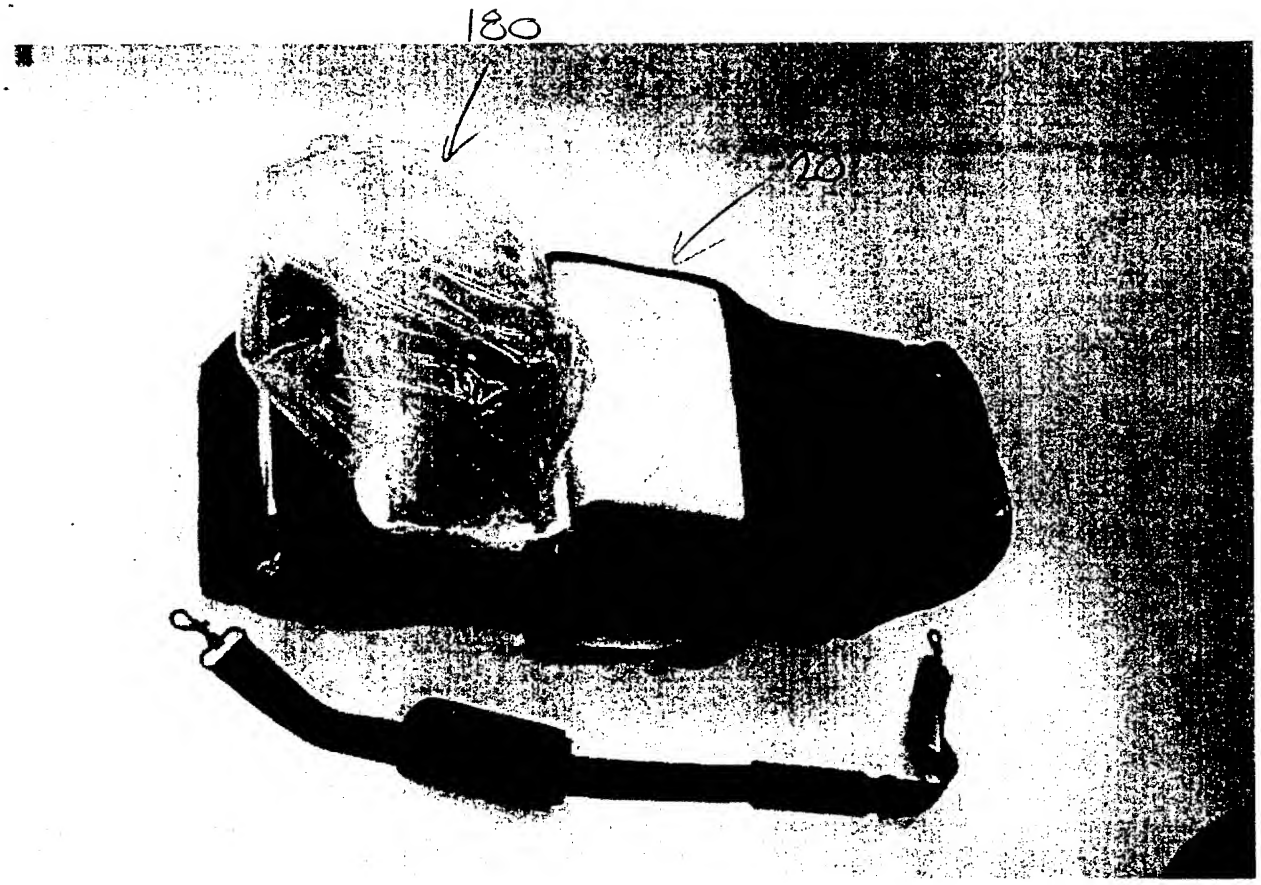

FIGURE 2C

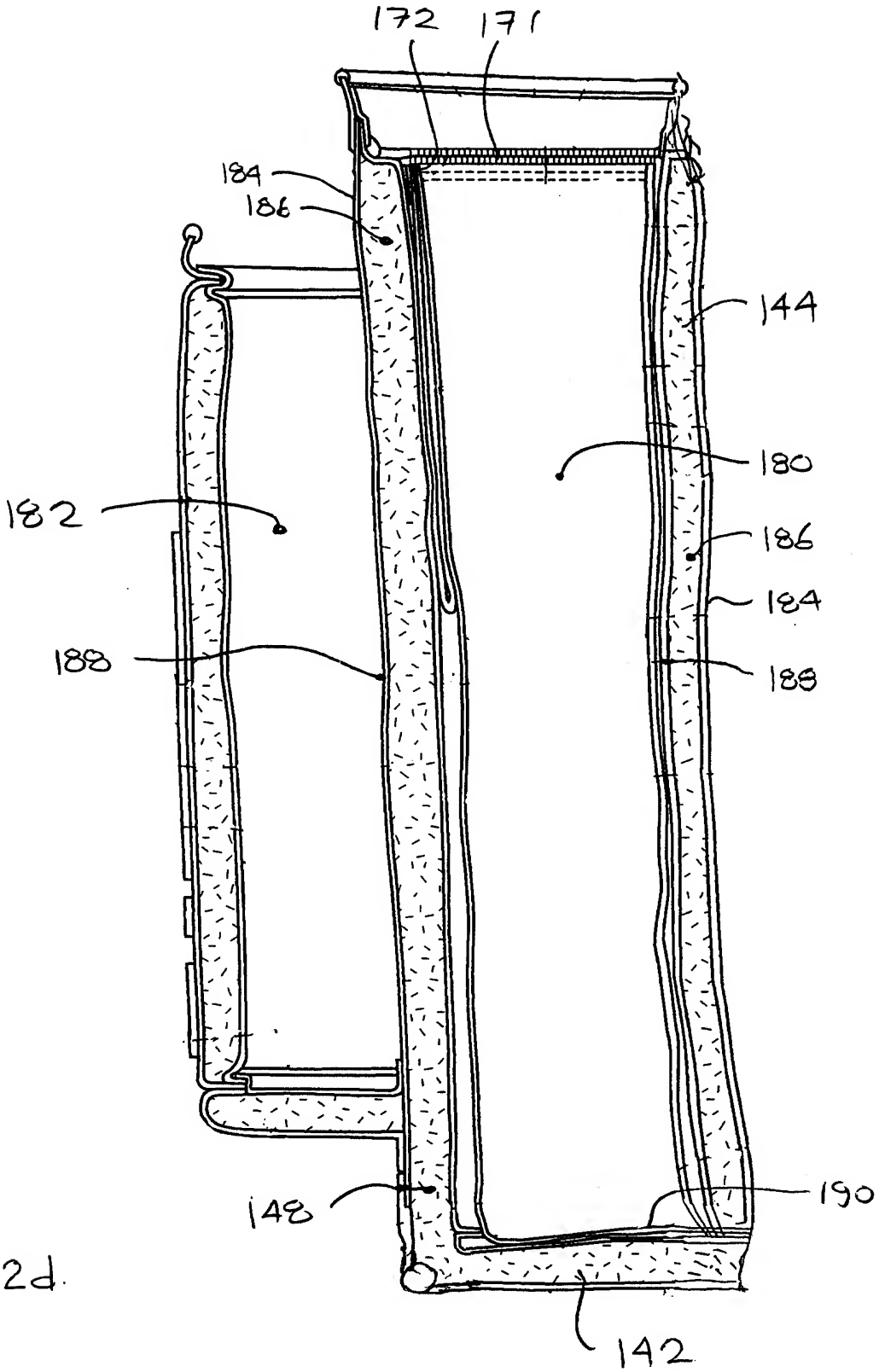

FIGURE 2d.

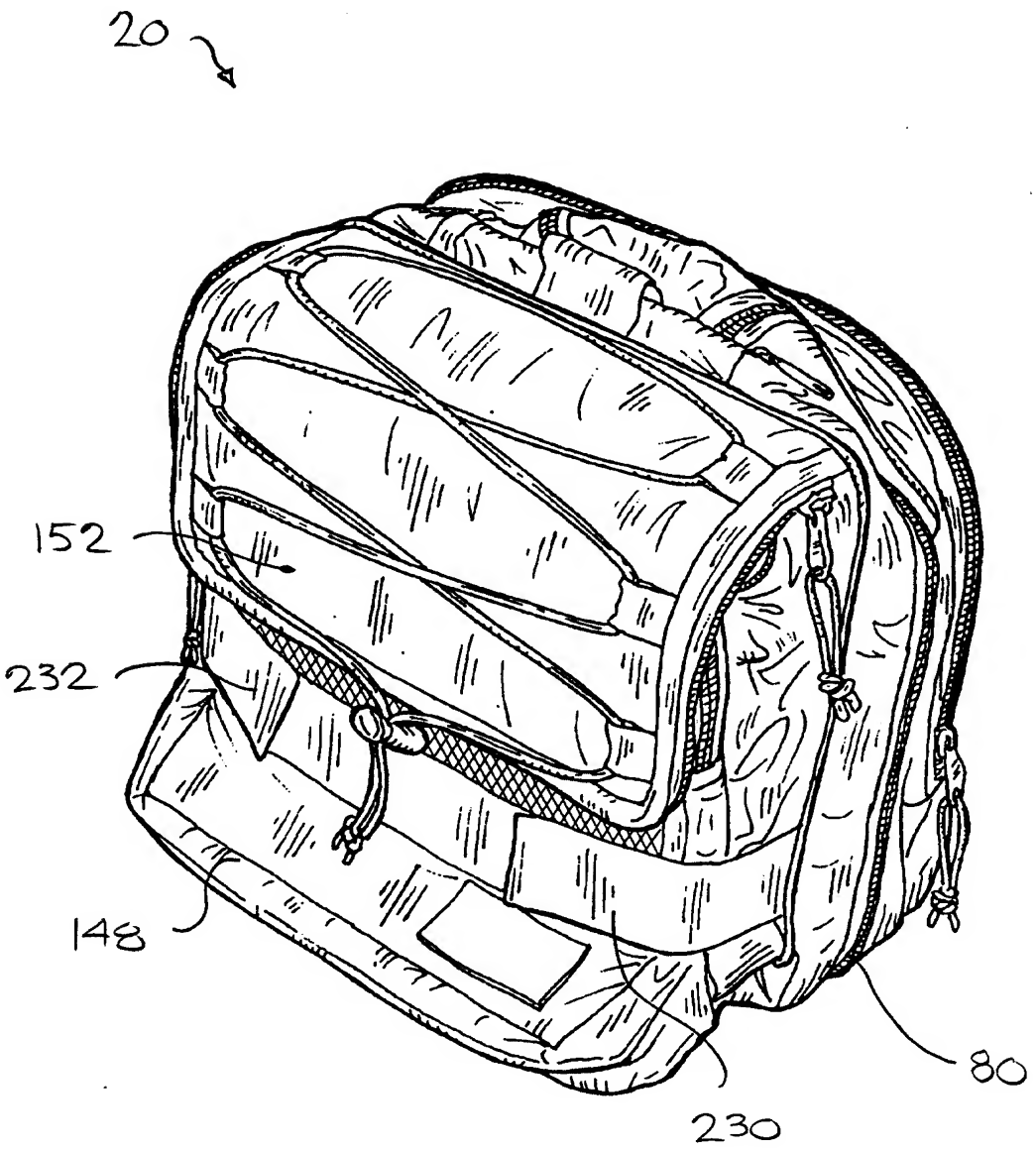

Figure 3a

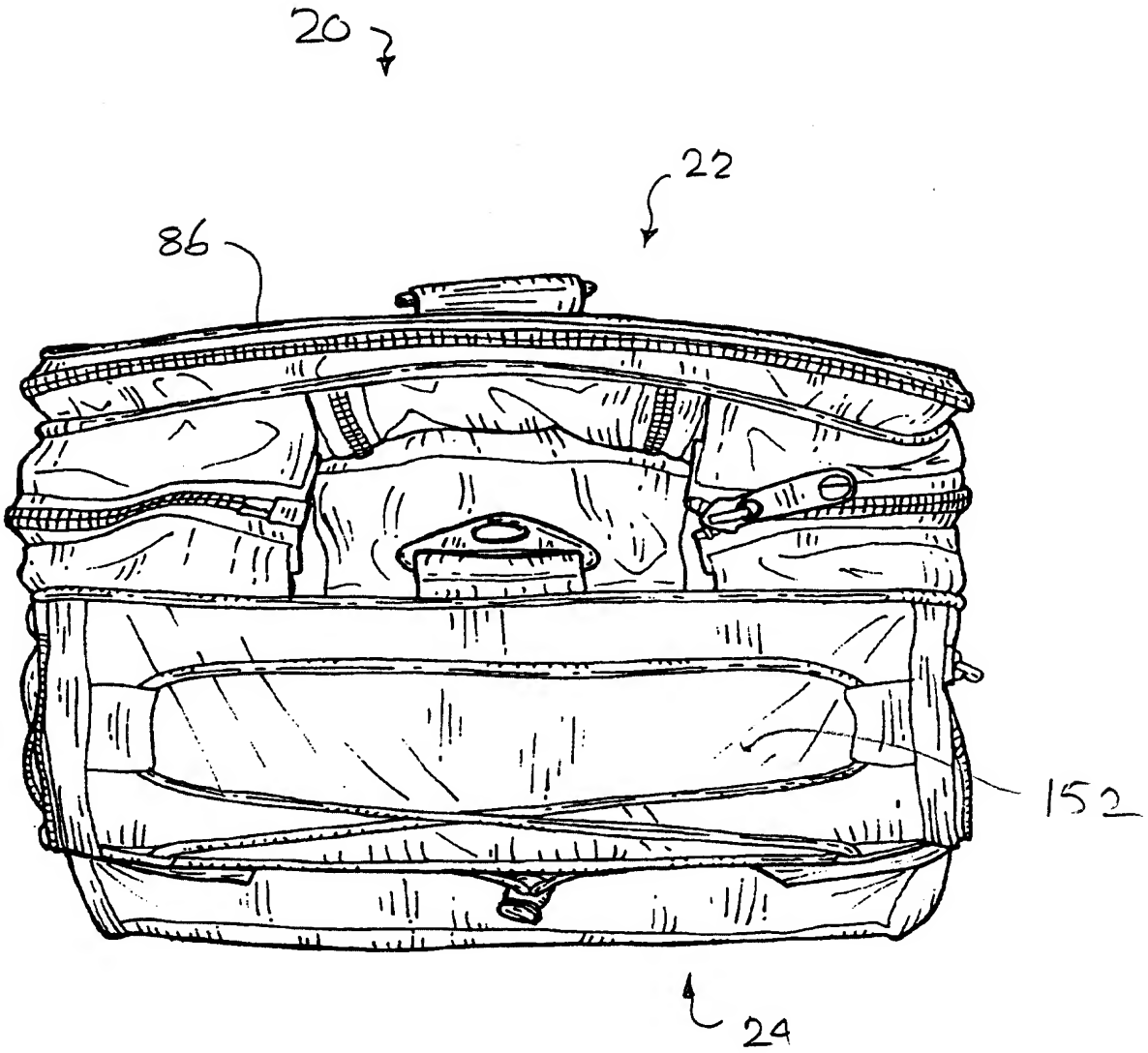

Figure 3b

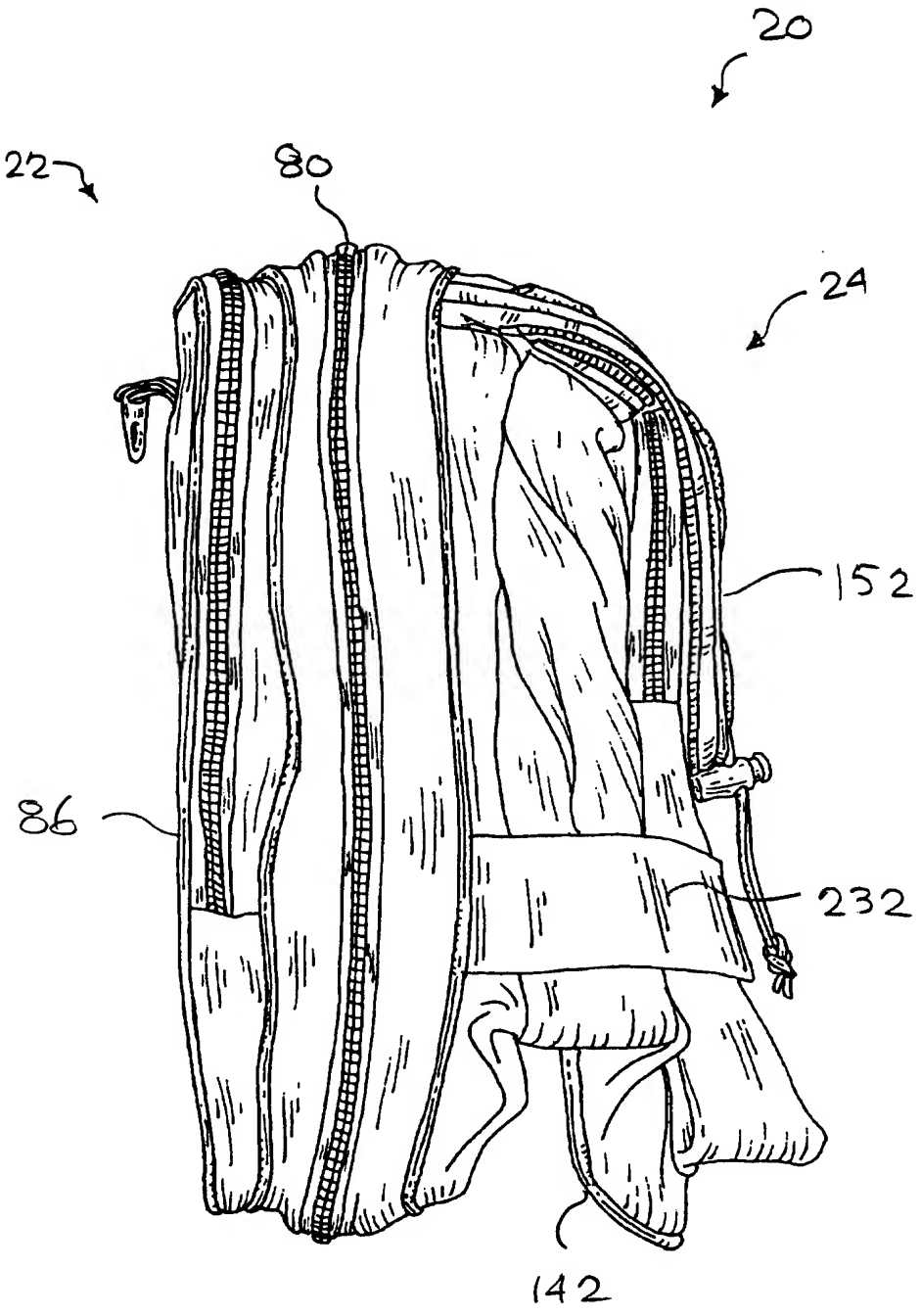

Figure 3c

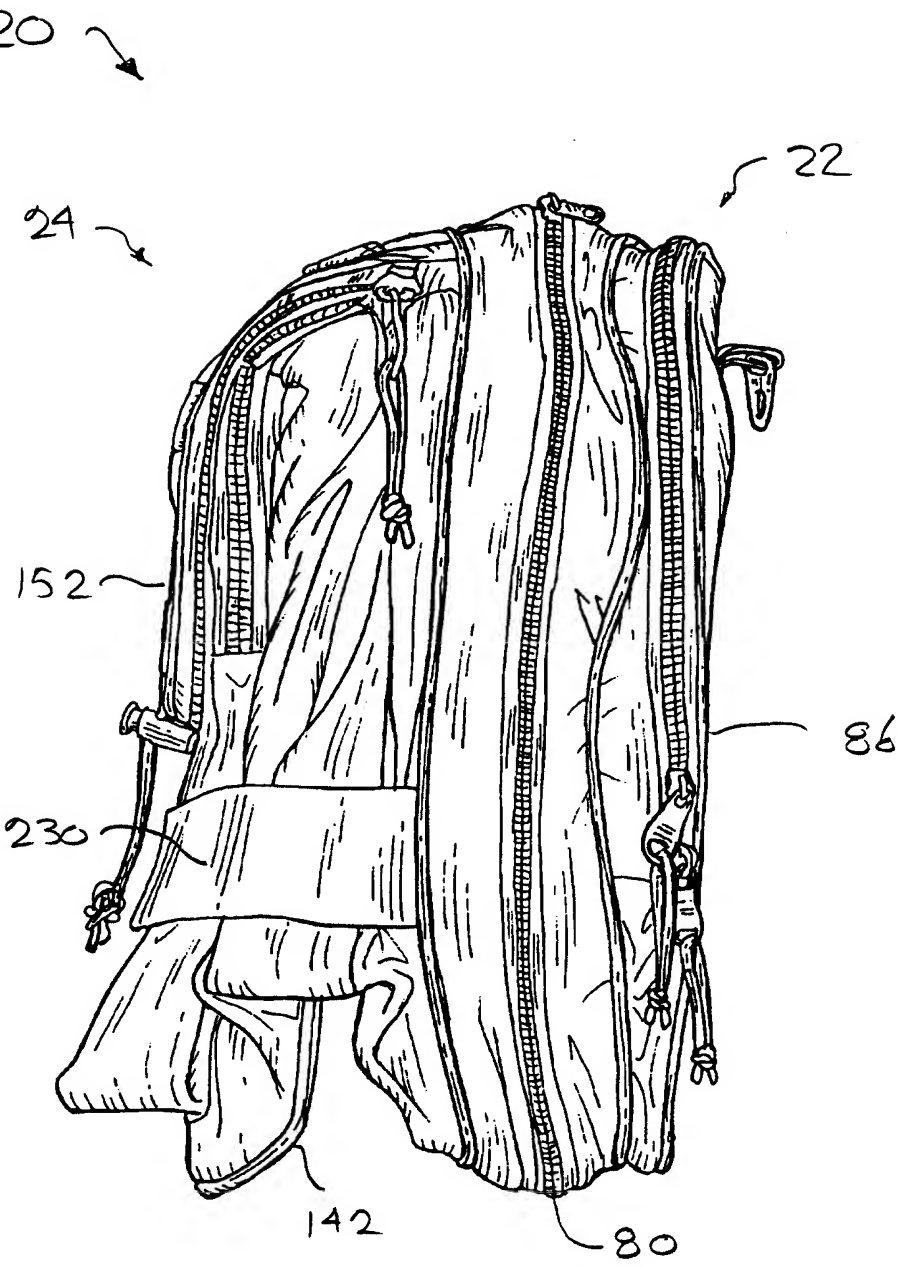

Figure 3d

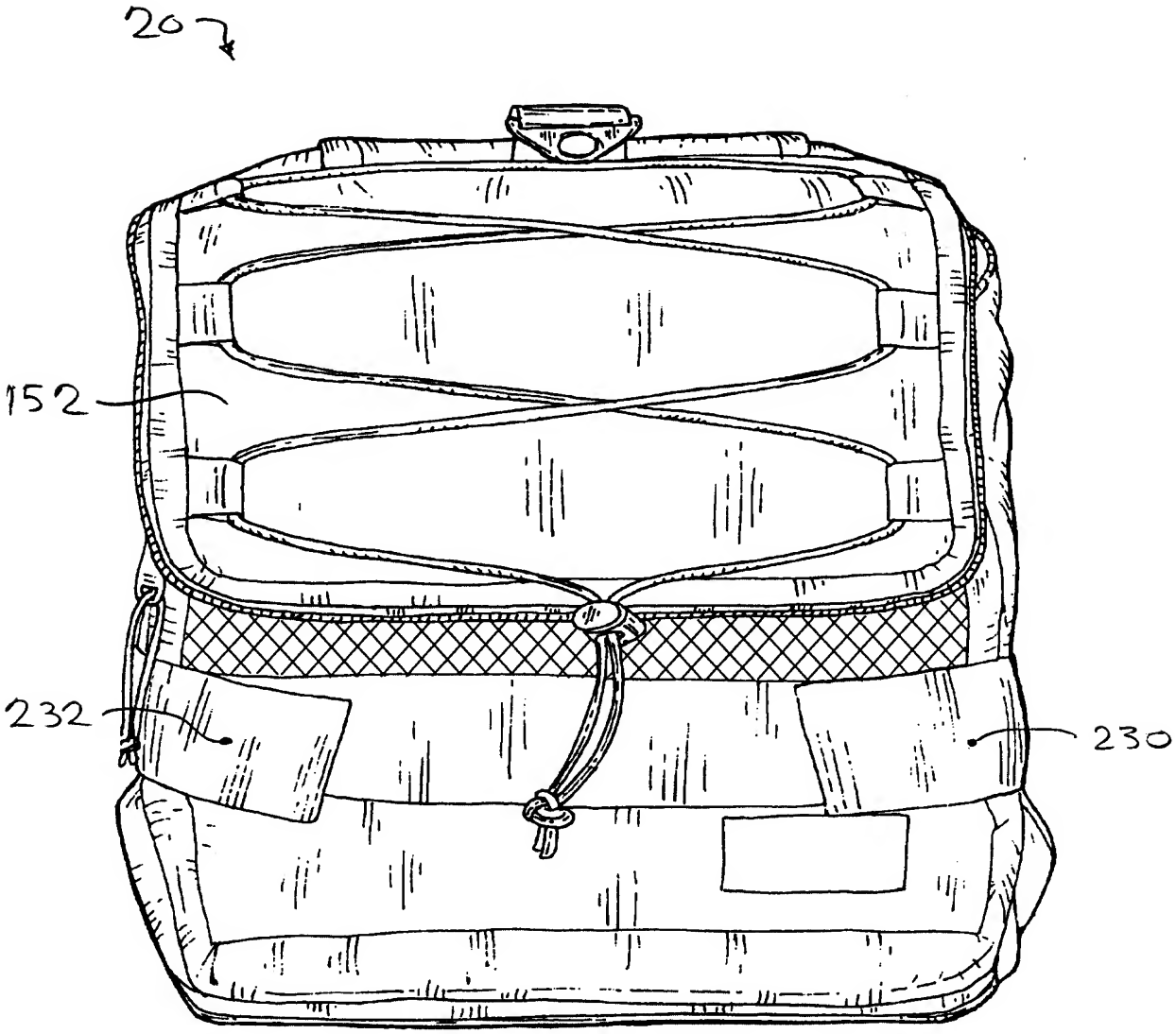

Figure 3e

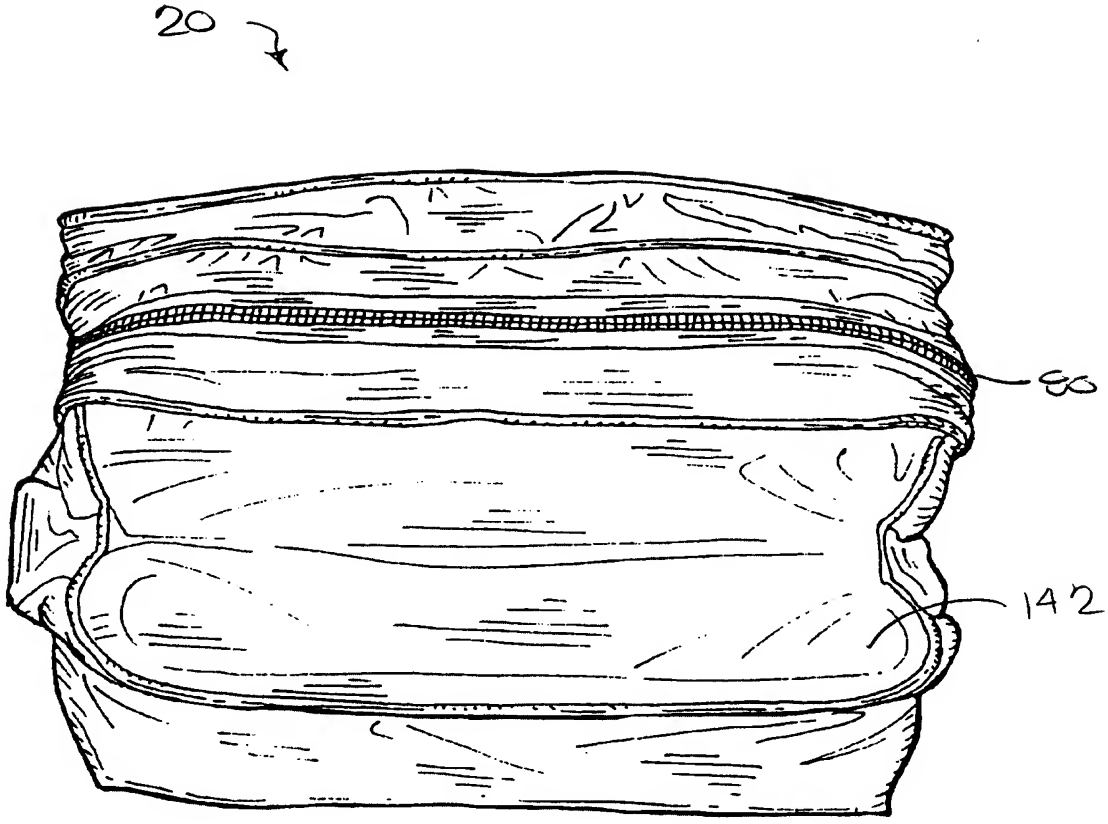

Figure 3f

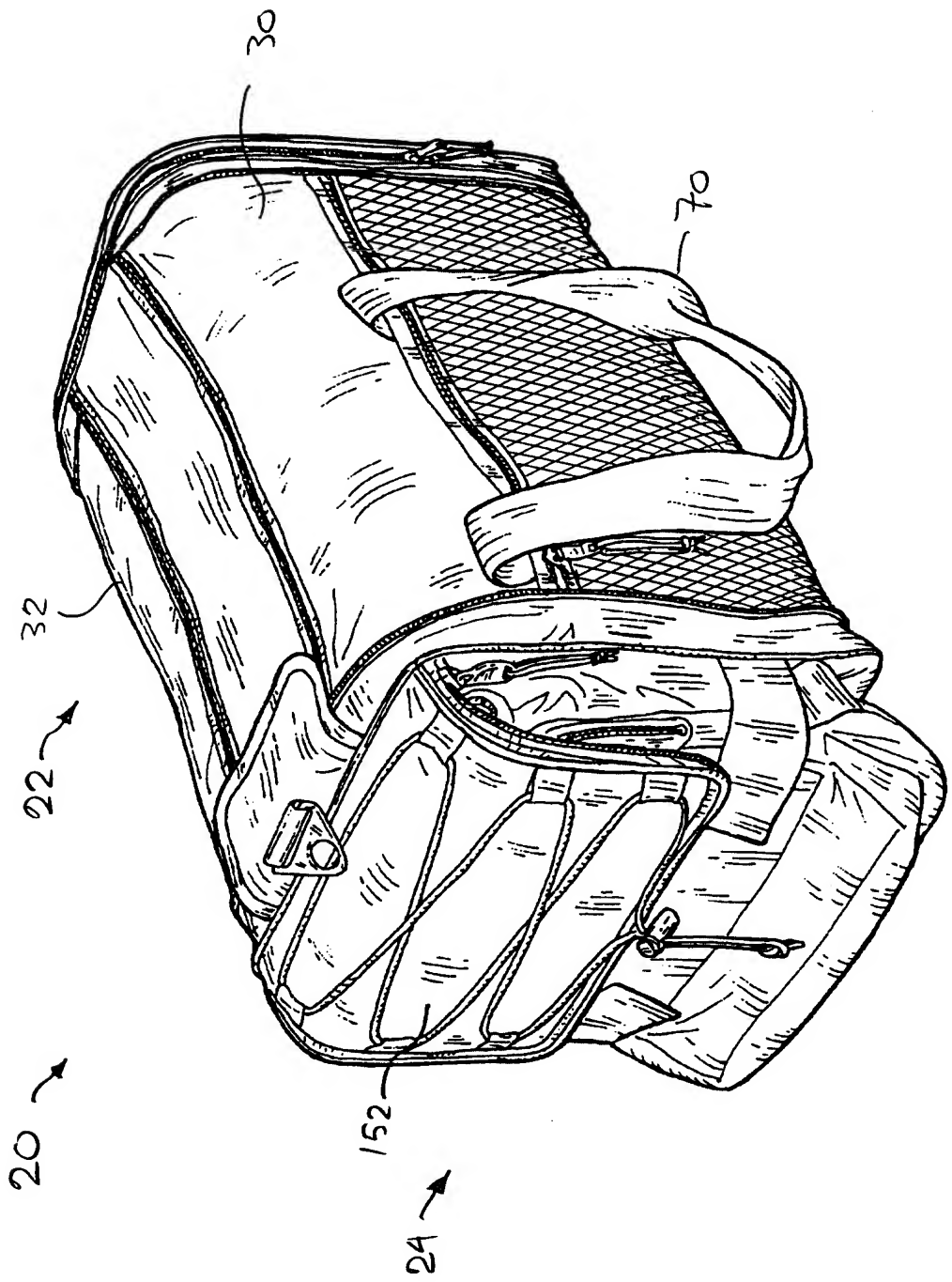

Figure 4a

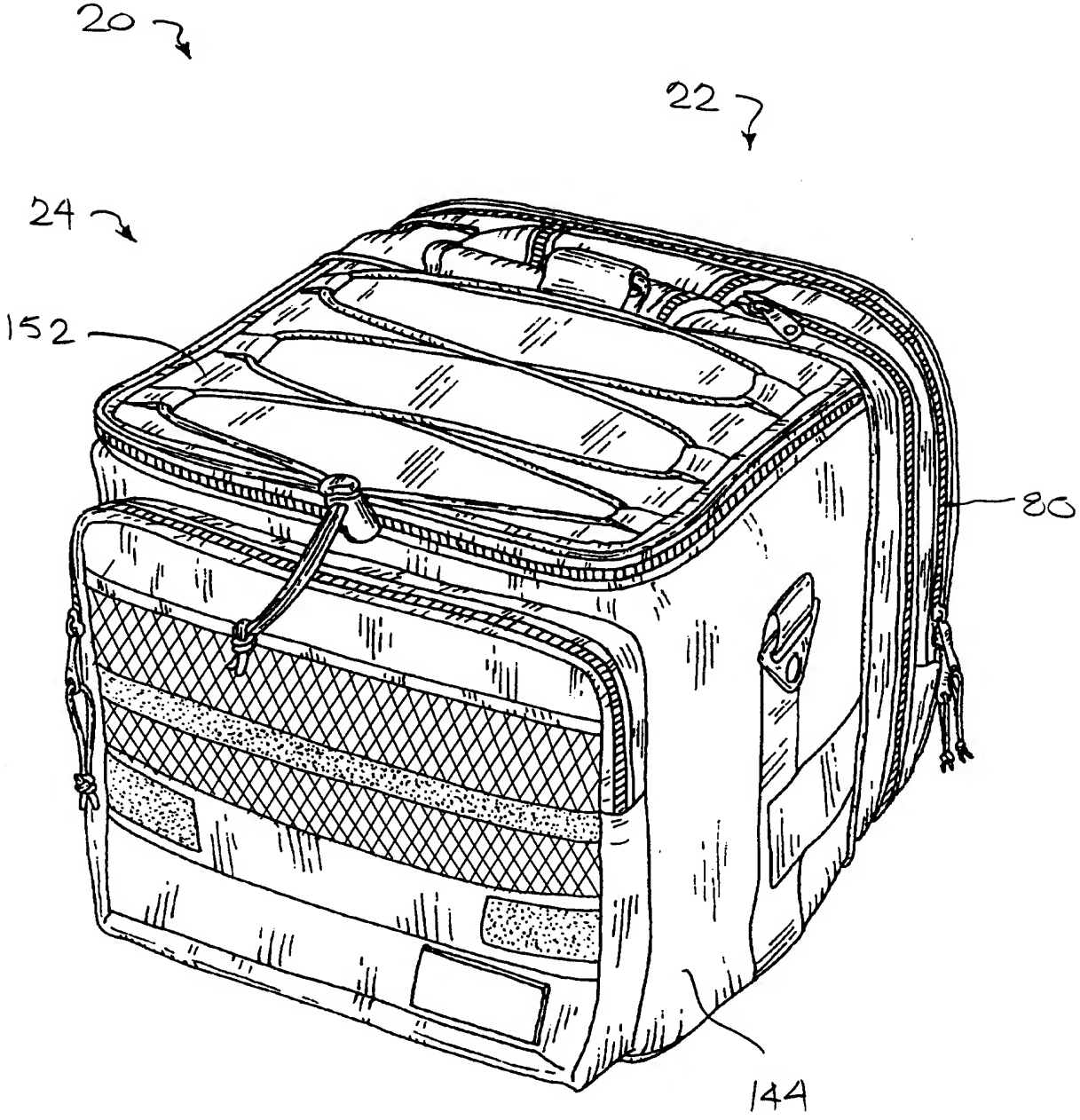

Figure 4b

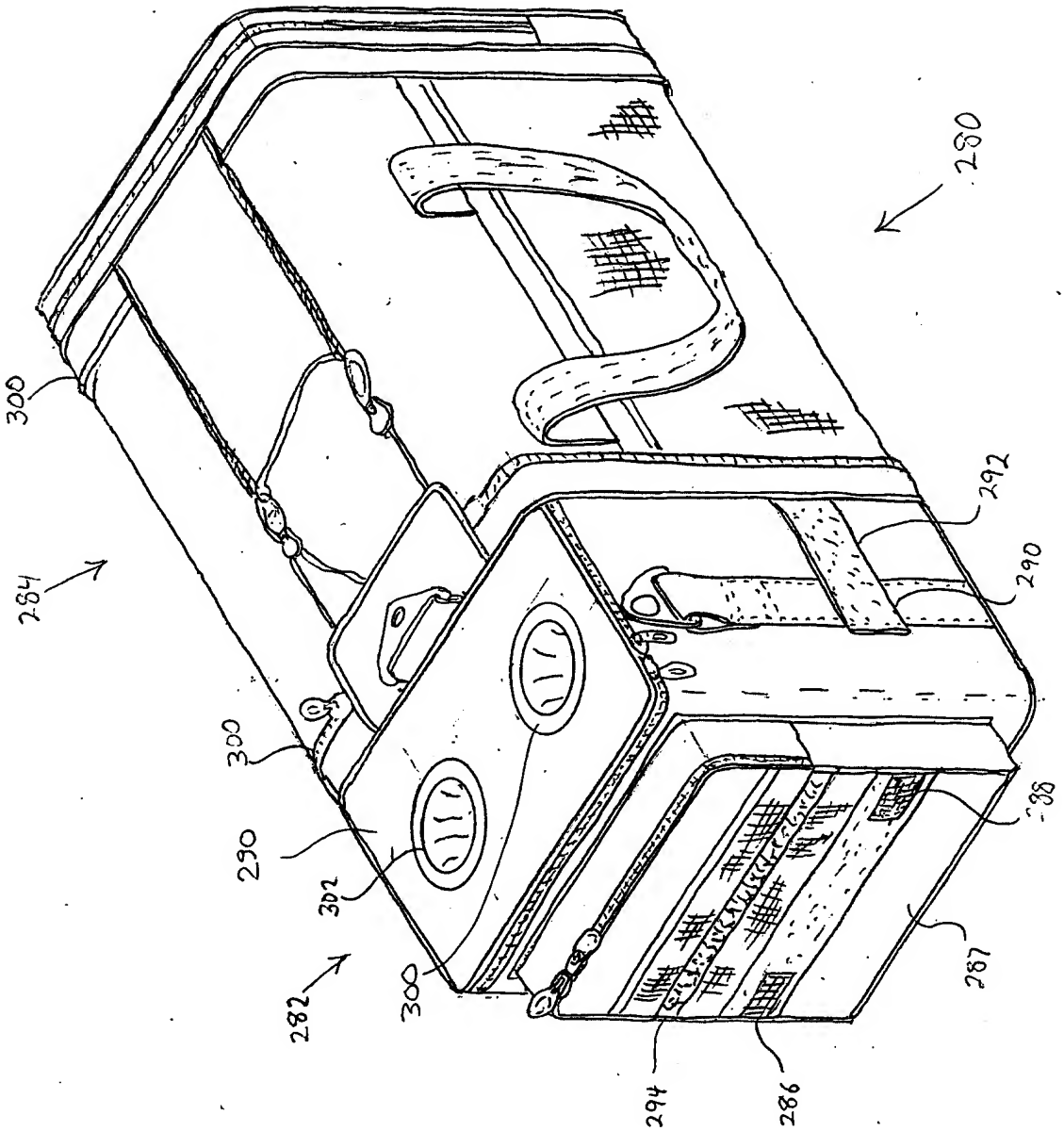

FIGURE 5a.

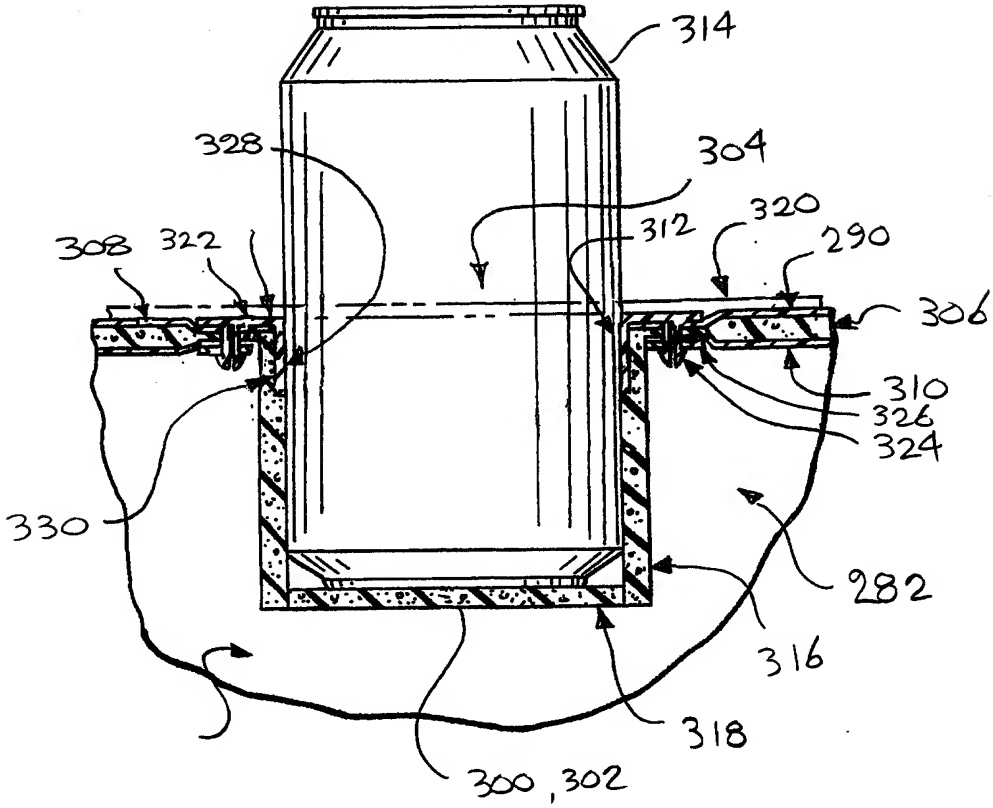
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FIGURE 5b

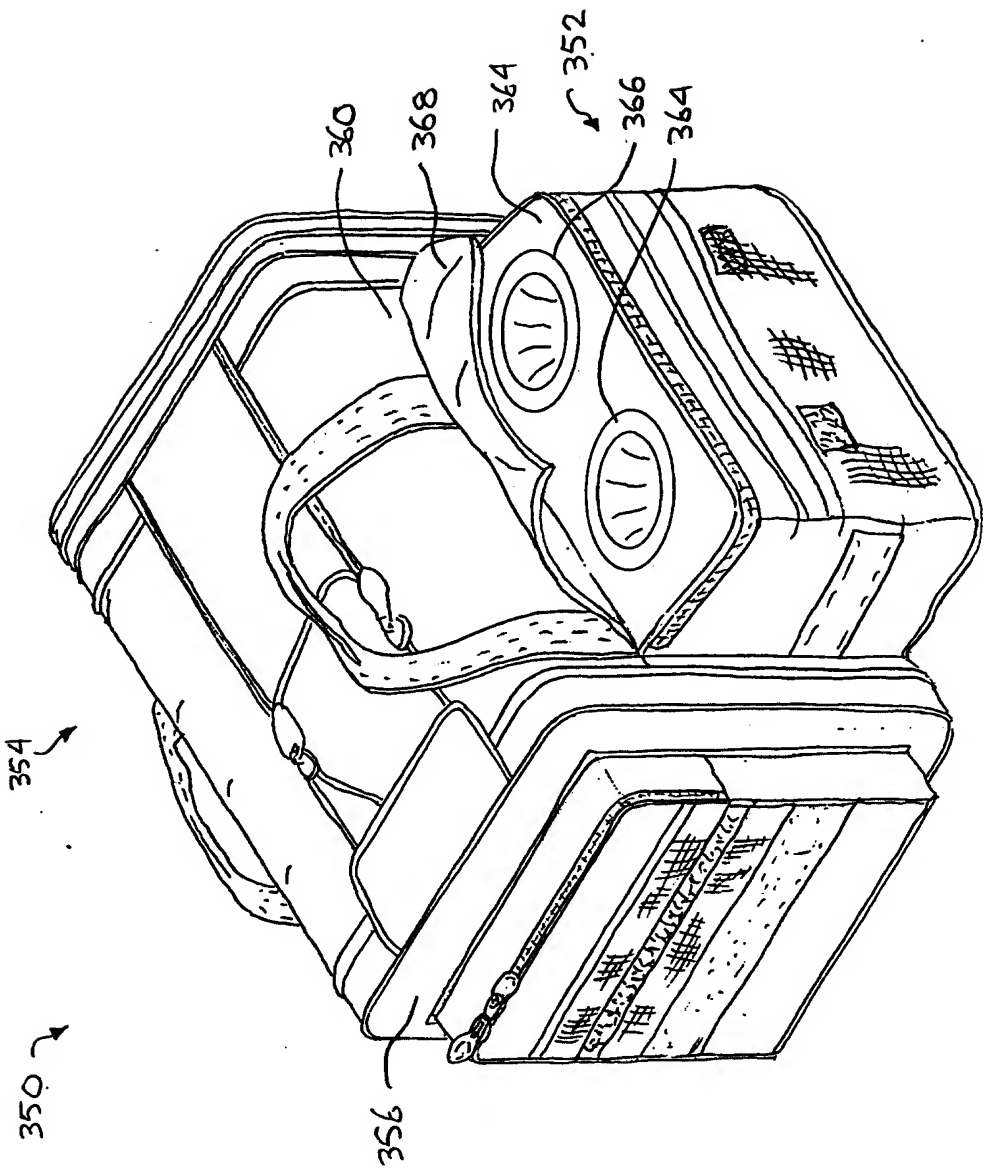

FIGURE 6

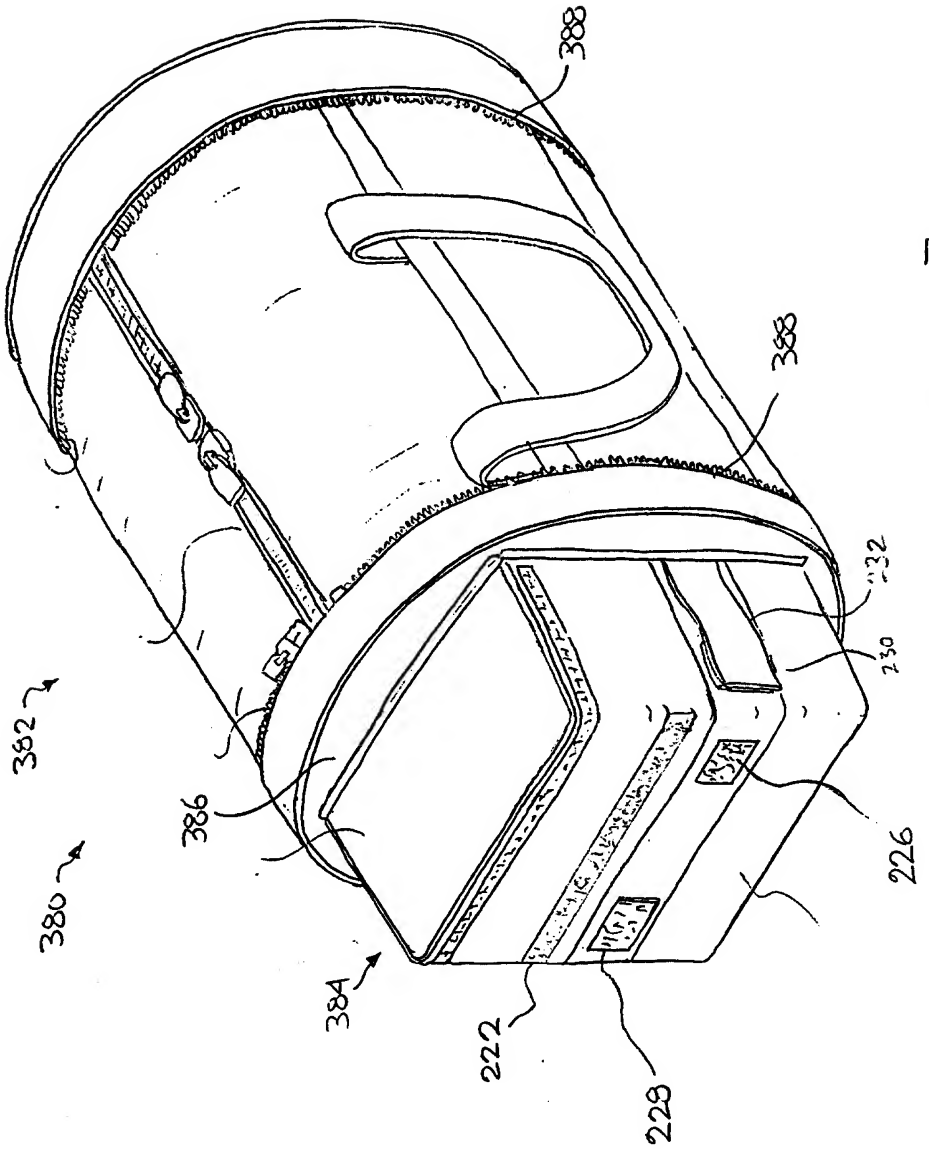

FIGURE 7

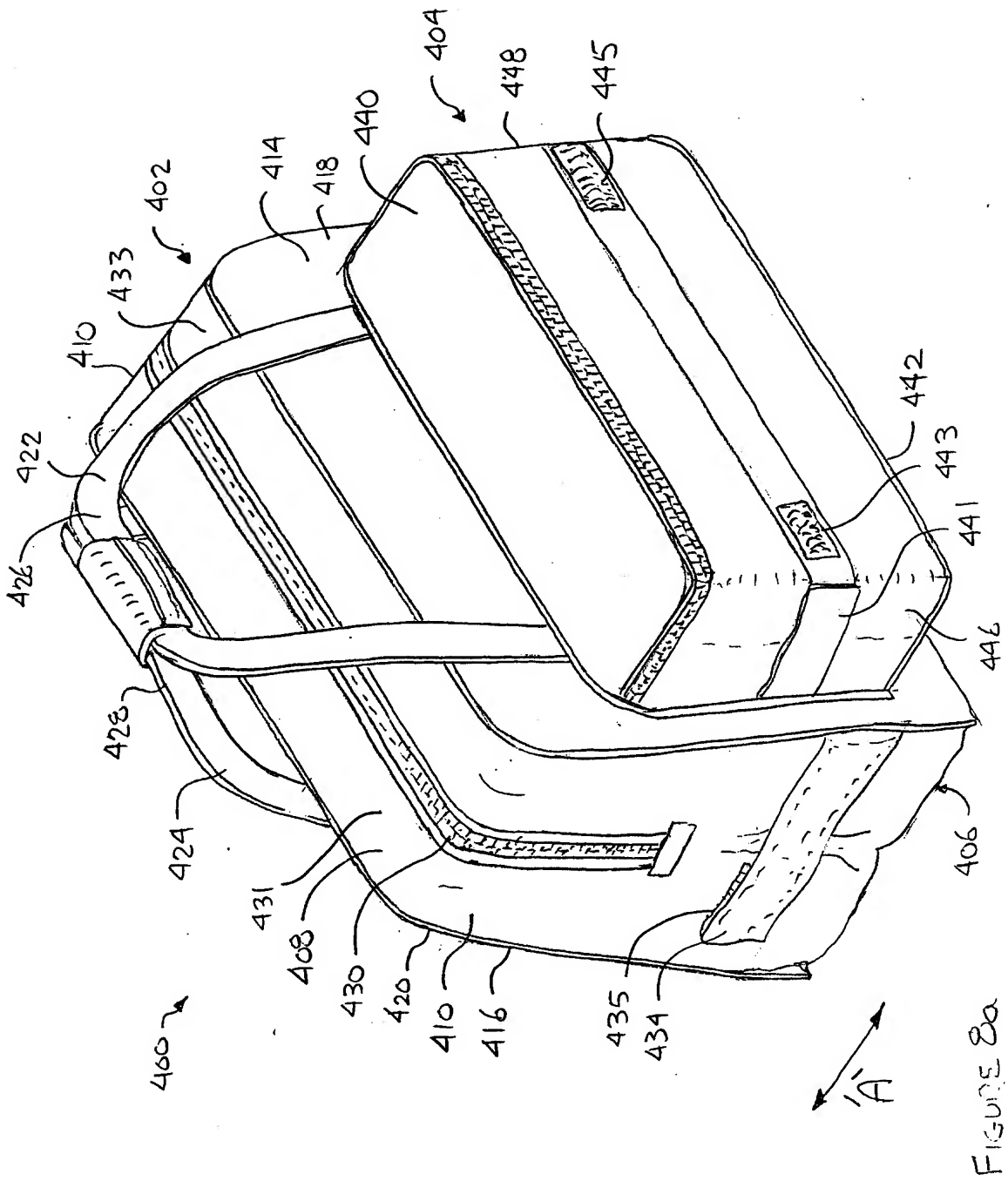
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FIGURE 8a

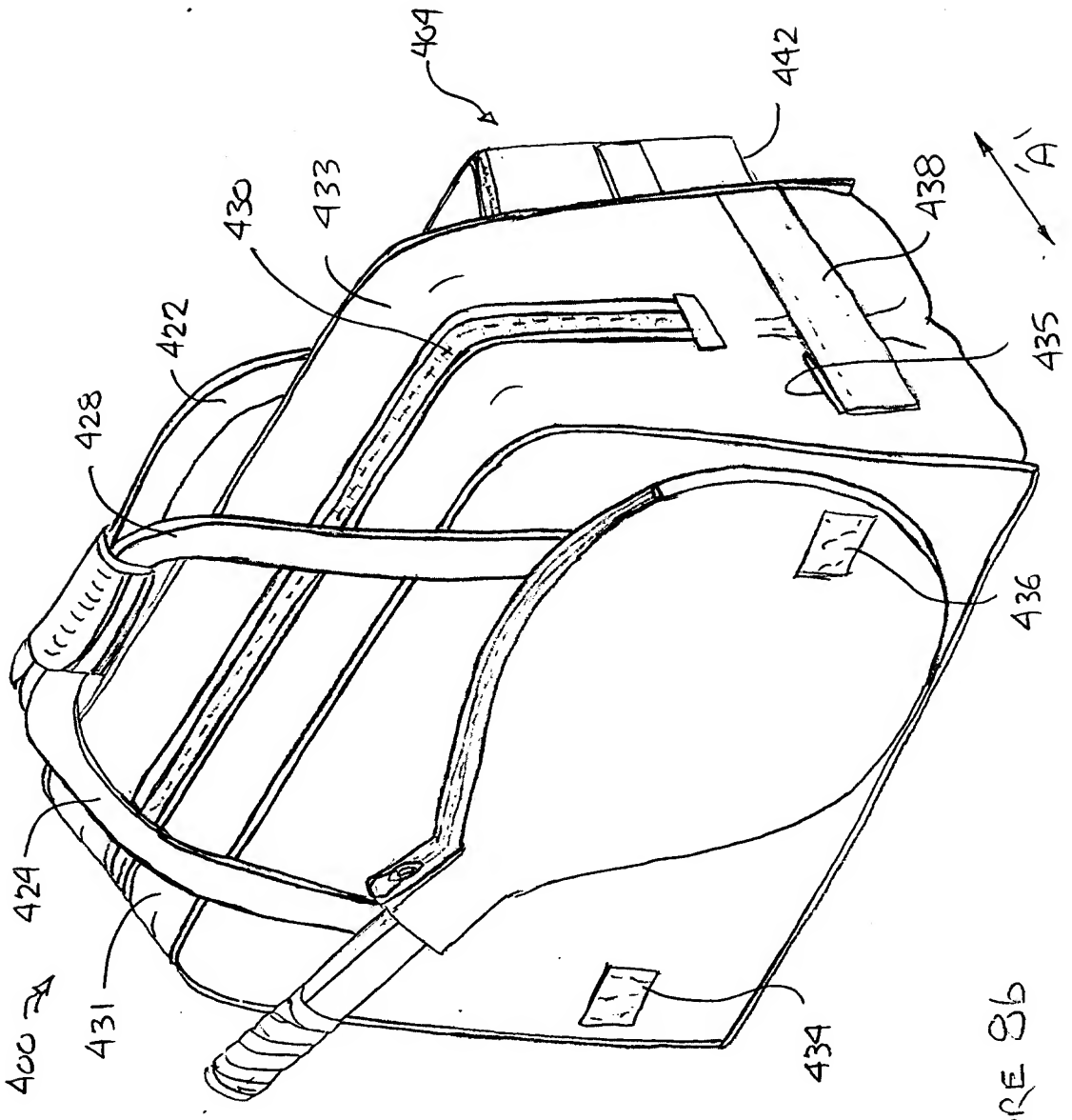

FIGURE 3b